

## JPRS Report

# **East Europe**

#### SPECIAL NOTICE

Effective 1 June 1987 JPRS reports will have a new cover design and color, and some reports will have a different title and format. Some of the color changes may be implemented earlier if existing supplies of stock are depleted.

The new cover colors will be as follows:

CHINA	
CIIINAac	
FAST EUROPEgo	ld
SOVIET UNIONsa	1mon
FAST ASIAye	llow
NEAR EAST & SOUTH ASIAb	lue
LATIN AMERICApi	nk
WEST EUROPEiv	ory
AFRICA (SUB-SNIARA)ta	n
SCIENCE & TECHNOLOGY gr	ay
WORLDWIDESpe	

If any subscription changes are desired, U.S. Government subscribers should notify their distribution contact point. Nongovernment subscribers should contact the National Technical Information Service, 5285 Port Royal Road, Springfield, Virginia 22161.

## JPRS-EER-87-085 2 JUNE 1987

### EAST EUROPE

## CONTENTS

#### POLITICAL

AT	R	ANI	IA
AL	D	N.	TW

IZVESTIYA Profiles Newly Elected Albanian Assembly	
(A. Nikolayev; IZVESTIYA, 18 Mar 87)	1
Alia, Kondi Visit Martyrs' Families	
(ATA, 6 May 87)	3
Leaders Pay Respects at Martyrs' Graves	
(ATA, 6 May 87)	5
Carcani Speaks at Tirana Food Combine	
(ATA, 16 Apr 87)	6
Carcani Receives Algerian Delegation	
(ATA, 24 Apr 87)	7
Sofokli Lazri on 'Friendly Visit' to Mexico	
(ATA, various dates)	8
Departure	8
Prize for Food	8
Alia Greets Tanzania's Mwinya on National Day	
(ATA, 26 Apr 87)	10

Albanian, SRV Delegations Hold Talks in Hanoi	
(ATA, 26 Apr 87)	11
SRV's Truong Chinh Receives Albanian Delegation	
(ATA, 26 Apr 87)	12
(ALA, 20 Apt 0/)	12
Cami Speaks at Film Studio Anniversary	
(ATA, 14 Apr 87)	13
Briefs	
Health Minister Receives WHO Official	15
Carcani Receives PRC, Algerian Envoys	15
Alia Greets Syria's al-Asad	15
Albania's Alia Greets Zimbabwe's Banana	15
Alia Receives Ethiopian Ambassador	16
PRK Official Thanked for Message	16
Minister Malile Receives WHO Official	16
Algerian Veterans' Delegation Arrives	16
Delegation Leaves for SRV	16
Mexican International Food Prize Award	17
Wreaths Laid on Martyrs' Graves	17
Nexhmije Hoxha Attends Hero's Anniversary	17
Oslo University Rector Visits Albania	17
Health Minister Leaves for Geneva	18
Mexican Ambassador Transferred, Leaves	18
Greek Chemists' Association President Visits	18
Greek Prefects Visit Durres, Sarande	18
Lushnje Land Reform Monument Inaugurated	18
Carcani Receives Egyptian Trade Unionist	19
Egyptian Trade Unionists Arrive	19
Egyptian Trade Unions Depart	19
Leaders Attend Film Award Presentation	19
HUNGARY	
Connex Interviewed on Fact Plac Labor Developments	
Gaspar Interviewed on East Bloc Labor Developments (Bjorn Johannessen; FRIHETEN, 24 Mar 87)	20
(Bjorn Johannessen; FRINEIEN, 24 Mar 6/)	20
POLAND	
Swedish Daily Profiles Jerzy Urban, Domestic Situation	
(Lars Ostberg; SVENSKA DAGBLADET, 5 Apr 87)	22
Satellite TV, Video in Terms of 'Propaganda Modernization'	
(Various sources, various dates)	27
Academic Views Future of 'Information War',	
Leslaw Wojtasik Interview	27
PZPR CC Propaganda Commission Discusses TV Role,	
by Izabella Waszczak	30
PZPR Ideology Seminar on Video Role, by Jerzy Koziol	32
	-

#### MILITARY

POLAND

	Major Military Journals Publish Tables of Contents for 1986	
	(Various sources, No 12, Dec 86)	33
	and have an and the sex sex sittings and sittings and sittings and sittings and sittings are sex sittings and sittings and sittings are sex sittings are s	
	Military Technology Journal	33
	Naval Journal	45
	Air Force Journal	49
	Main Political Administration Journal	56
	Civil Defense Journal	64
	Advances in Computerized Civil Defense Programs	
	(Stanislaw Strzesniewski; PRZEGLAD OBRONY CYWILNEJ,	
	No 1, Jan 87)	68
	'Socialist National Defense Theory' Cited in MYSL WOJSKOWA	
	(PRZEGLAD OBRONY CYWILNEJ, No 1, Jan 87)	72
ECONOM	ric	
	GERMAN DEMOCRATIC REPUBLIC	
	Industrial Requirements, Methods Set New Managerial Agenda (WIRTSCHAFTSWISSENSCHAFT, No 2, Feb 87)	73
	Poor 1st Quarter Economic Performance Reflects Severe Winter (SUEDDEUTSCHE ZEITUNG, 7 Apr 87)	91
	YUGOSLAVIA	
	Zagreb Paper Calls for Changes in Foreign Exchange System (Zvonko Gajski; VJESNIK, 4 Apr 87)	93
	Consequences of Rural Depopulation Examined (Branko Colanovic; NEDELJNE INFORMATIVNE NOVINE, 5 Apr 87)	97
/7310		

- c -

#### IZVESTIYA PROFILES NEWLY ELECTED ALBANIAN ASSEMBLY

PM191025 Moscow IZVESTIYA in Russian 18 Mar 87 Morning Edition p 5

[A. Nikolayev article under the rubric 'We Answer Readers' Letters": "After the Elections"—first paragraph is reader's letter]

[Text] It was recently reported in IZVESTIYA that the first session of the newly elected Albanian People's Assembly had been held in Yirana. I would like a few more details about the elections and the composition of the new Albanian parliament. V. Trofimov, teacher. Kuybyshev.

As a result of the 1 February 1987 elections almost one-third of the People's Assembly, 11th Convocation -- Albania's supreme organ of state power--has been renewed.

The Central Electoral Commission reported that 100 percent of registered voters--1,830,653 people in all--took part in the elections. According to the commission's figures they all voted without exception for the proposed candidate deputies. For election purposes the country was divided by the number of parliamentary deputies into 250 constituencies. One candidate ran in each constituency. Thus, each deputy of the Albanian People's Assembly, 11th Convocation represents 7,322 voters (citizens aged 18 and over) on average.

The first session of the newly elected People's Assembly, held at the end of February, reported that 48 percent of deputies were aged under 40, 42.8 percent were between 41-60, and 9.2 percent were over 60.

As Qemal Bregasi, chairman of the Albanian People's Assembly Credentials Commission, noted in his report, more than 84 percent (that is, 211) of the deputies have higher education. With regard to the social makeup of the current People's Assembly it was reported that more than half the deputies are the sons of workers or people who were or are workers, while 26 percent of the deputies are workers in the cooperative sector.

Forty-nine members of the Albanian Workers Party [AWP] Central Committee (including all members and candidate members of the AWP Central Committee Politburo) were elected to the People's Assembly. Fourteen members of the government (the chairman of the Council of Ministers, his deputies, and nine ministers) became members of parliament.

The deputies include 12 (of the 26) first secretaries of party rreth committees, 11 chairman of rreth people's council executive committees, 11 directors of industrial enterprises, 2 state farm directors, 32 chairmen of agricultural cooperatives, workers at state establishments, figures from the fields of science, technology, culture, and art. servicemen, and others. There are 11 worker deputies and 5 peasant deputies. Twelve mass social organization activists were also elected.

Seventy-four women were elected as People's Assembly deputies.

The first People's Assembly session elected the 15-strong People's Assembly Presidium. Ramiz Alia, first secretary of the AWP Central Committee, was reelected chairman of the presidium.

The People's Assembly (Chairman Petro Dode), Parliamentary Group, and People's Assembly standing commissions were also confirmed. Certain changes were made to the composition of the government—Council of Ministers—approved by the session and proposed by Adil Carcani, chairman of the Council of Ministers (a fourth deputy chairmanship was instituted, the number of ministries was increased from 15 to 16 by dividing the Ministry of Light and Food Industries into two separate ministries, the former Ministry of Education and Culture was changed to the Ministry of Education, and a Culture and Arts Committee was set up under the Council of Ministers).

The session adopted a law on the creation of a State Control Commission within the Council of Ministers. Enver Halili was named as its chairman. The Supreme Court (President Aranit Cela) was elected and Krapo Mino was appointed procurator general.

The session ratified the economic and cultural development plan, the state budget for 1987, and the plan for the Eighth 5-Year Plan.

/9274

CSO: 2020/89

POLITICAL ALBANIA

ALIA, KONDI VISIT MARTYRS' FAMILIES

AU061210 Tirana ATA in English 0740 GMT 6 May 87

[Text] Tirana, 5 May (ATA)—On 5 May, Comrade Ramiz Alia, first secretary of the Central Committee of the party and president of the Presidium of the People's Assembly, paid visits to the families of the hero of the people, Mujo Ulqinaku, the martyr, Bahri Shaqiri, and the hero of the people, Kajo Karafili in Tirana.

During these visits he was accompanied by the alternate member of the Political Bureau of the Central Committee of the party and first secretary of the District Party Committee, Comrade Pirro Kondi.

Comrade Ramiz Alia met with and warmly greeted the members of these families. They together recalled unforgettable events from those glorious years of the Anti-Fascist National Liberation War and expressed their feelings of the profound gratitude and respect of the party and people for their sons who laid down their lives for the liberation of the homeland and the triumph of the people's revolution, for the happiness of the people and prosperity of the country.

Mujo Ulqinaku is a symbol of Albanian patriotism, says Comrade Ramiz Alia to the sons of the hero and the other members of their families. He fought for the cause of the freedom and independence with that lofty patriotic sentiment our people have inherited from generation to generation. Precisely these feelings were displayed by Mujo through his heroism and example, by receiving the enemy arms in hand, just as our people have always done.

Further on Comrade Ramiz Alia said that our road is correct. The teachings of Comrade Enver Hoxha, the teachings of Marxism-Leninism have illuminated our road and we march forward.

During the visit to the House of Bahri Shaqiri Comrade Ramiz Alia warmly talks with the members of this family.

Today, it is the Martyrs' Day, says Comrade Ramiz Alia. Meeting their mothers, brothers and sisters, seems to us as if we meet our comrades, the martyrs of war. It is something very good that 5 May has been assigned for all the

martyrs. But in every day our entire people thinks that we would not have such an Albania, would not enjoy this freedom, would not have such blessings, without the martyrs' blood. We honour the martyrs by defending the homeland, making Albania always forge ahead.

A warm conversation took also place in Nurije's house, the sister of the hero of the people, Kajo Karafili.

Kajo Karafili is one of the brave partisans who was known far and wide Albania for his struggle, bravery, heroism, says Comrade Ramiz Alia. Comrade Enver Hozha too has spoken too much of Kajo Karafili as a brave man, staunch fighter for the cause of the party, for the cause of the people. Coming to your house, we recall Kajo and all the martyrs, whose blood ties in the foundations of Albania so that children rear up healthy and happy.

/9274 CSO: 2020/89 POLITICAL ALRANIA

LEADERS PAY RESPECTS AT MARTYRS' CRAVES

AU061226 Tirana ATA in English 0730 CNT 6 May 87

["Our Entire People Commemorated With Profound Veneration Their Martyrs--Wreaths Laid and Homage Paid to the Martyrs' Graves of the Nation"--ATA headline]

[Text] Tirana, 5 May (ATA)--On 5 May, our entire people commemorated with profound veneration their martyrs. In token of gratitude for their immortal deed, thousands of inhabitants of capital with bouquets of flowers in their hands headed to the martyrs' graves of the nation.

At 10:00 party and state leaders, the member of the Political Bureau and secretary of the Central Committee of the party, Comrade Hajredin Celiku; the alternate member of the Political Bureau of the Central Committee of the party and vice chairman of the Council of Ministers, Comrade Vagjel Cerrava; the alternate member of the Political Bureau of the Central Committee of the party and chief of the General Staff of the Army, Comrade Kico Mustaqi; the alternate member of the Political Bureau of the Central Committee of the party and first secretary of the District Party Gommittee, Comrade Pirro Kondi; the vice president of the Presidium of the People's Assembly, Comrade Xhafer Spahiu; the member of the Central Committee of the party and chairman of the General Council of DFA [Democratic Front of Albania], Comrade Nexhmije Hoxha: the chairman of the National Committee of the War Veterans of the Albanian People, Ahefqet Peci, and other comrades went there.

Wreaths were laid on the monument "Mother Albania" on behalf of the Central Committee of the party. the Presidium of the People's Assembly, the Council of Ministers, etc.

The party and state leaders paid homage to the grave of Comrade Enver Boxha, honouring the memory of the glorious founder and leader of the party and people, the legendary commander, the architect of socialist Albania. Likewise, they stood in silence and honoured with the first up near the graves of Comrades Bysni Kapo, Gogo Nushi and Qemal Scafa.

Then homage was paid to the graves of those fallen for the liberation of the homeland and triumph of the people's revolution.

/9274

CSO: 2020/89

#### CARCANI SPEAKS AT TIKANA FOOD COMBINE

AU161034 Tirana ATA in English 0730 GHT 16 Apr 87

[Text] Tirana, 16 Apr (ATA) -On 15 April before noon, the member of the Political Bureau of the Central Committee of the party and chairman of the Council of Ministers, Comrade Adil Carcani, paid a visit to the "Ali Kelmendi" Food Combine in the capital. He visited some factories of this combine, where he met and talked with workers and specialists on problems of expanding the diversity of articles and increase of their quality, etc. Then a meeting was organised in one of the halls of the combine, which was attended by specialists and leading cadres of the combine and some enterprises of foodstuff industry and others,

Present were also the alternate member of the Political Bureau of the Central Committee of the party and vice chairman of the Council of Ministers, Comrade Vangjel Cerrava; the first secretary of the District Party Committee, Comrade Pirro Kondi, the minister of food industry, Jovan Bardhi and other comrades.

The vice director of the combine informed Comrade Adil Corcani on some of the achievements in increasing production and diversity of articles, as well as on the targets this collective has set to meet better the growing needs of the people for food articles.

Likewise, leading cadres and specialists of bread factory and glassware one spoke.

Taking the floor, Comrade Adil Carcani, after appreciating the good hitherto work stressed that the fulfillment of the needs of the people has been and is in the center of the economic policy of the party. He pointed out that just as Tirana must be as a laboratory for the whole country as Comrade Enver Hoxha has said, "Ali Kelmendi" Food Combine is becoming a laboratory for the entire foodstuff industry, regarding the quality and diversity of production, the scientific work and creative thinking of innovators.

Further on, Comrade Adil Carcani dwelt on some of the most important directions the work of the collective of this combine and of the other enterprises of this system must be entered upon to realize the great tasks set by the 9th Congress of the party.

/9274 CSO: 2020/89

#### CARCANI RECEIVES ALGERIAN DELECATION

AU241329 Tirana ATA in English 0957 GMT 24 Apr 87

[Text] Tirana, 24 Apr (ATA) -- On 23 April, the chairman of the Council of Ministers of the People's Socialist Republic of Albania, Adil Carcani received the delegation of mujahidins of the People's Democratic Algerian Republic, headed by the minister of mujahidins, Mohamed Djeghaba, and held a warm and friendly talk with him,

Comrade Adil Carcani spoke about the close traditional ties of the Albanian people with the Algerian one and expressed his satisfaction over the allisided friendly relations and cooperation existing between Albania and Algeria. He expressed his confidence that they will strengthen and develop further more to the benefit of our two friendly countries and people.

On his part, the head of the Algerian delegation of mujahidins Mohamed Djeghaba said that the warm welcome reserved for him in friendly Albania, as well as the close ties established between the organisations of the war veterans of the Albanian and Algerian peoples are another expression of the deep friendship, which exist between our two peoples and countries.

Attending were the chairman of the Committee of the War Veterans of the Albanian people, Shefqet Peci. the vice-minister of the foreign affairs Sokrat Plaka and other comrades. The ambassador extraordinary and plenipotentiary of the People's Democratic Algerian Republic in Tirana, Rachid Haddad was present too.

The delegation of the mujahidins of the People's Democratic Algerian Republic headed by the minister of mujahidins, Mohamed Djeghaba, left our country on 23 April.

/9274 C50: 2020/89

SOFOKLI LAZRI ON 'FRIENDLY VISIT' TO MEXICO

Departure

AU021254 Tirana ATA in English 0945 GNT 4 Apr 87

[Text] Tirana, 2 Apr (ATA) -- The director of the Institute of the International Relations' Study, Sofokli Lazri, left for a friendly visit to Mexico at the invitation of the director general of the Economic and Social Studies' Centre of the United States of Mexico, Luis Echeverria.

Prize for Food

AU081207 Tirana ATA in English 1011 GMT 8 Apr 87

[Excerpt] Tirana, 8 Apr (ATA) -- The ceremony of handing over the international prize for food "Enrique Diaz Ballesteros" was organized in Mexico City on 6 April, 1987. This prize was awarded to Albania for the year 1987 for its achievements in ensuring food for the people.

Handing over the diploma and medal of this prize to Prof Sofokli Lazri, Enrique Gama Munjoz, president of the International Food Institute, said that the successes scored in the agricultural production of the PSR of Albania in less than 40 years, constitutes an example showing what a people can achieve even when they inherit a great backwardness of productive forces in agriculture. It is difficult to believe now that Albania has been the most backward country in Europe in the past. Now one may speak of the important victories scored in agriculture, the uplift of the standard of living of peasantry, the ever better fulfillment of the needs of the whole people for agricultural and livestock products and the uninterrupted narrowing of the differentiations between the countryside and city, which have also been appreciated by the World Food Organization (FAO). Further on he said that a result of this road is the fact that the Albanian people are self-sufficient regarding food for their own need, having no foreign debts, thus becoming an example to the whole world. The awarding of [the] prize for 1987 to Albania, said Enriques Munjoz, is not at all astonishing to us, who have known its experience. I think that such an example is valuable to all those countries which have a parcelled out agriculture and backwardness in their productive forces in agriculture. Each of them may make use of this example, and our

country which has similarity with your country in this aspect, must have your experience in the center of attention and must study it. Handing over this prize which bears the name of an outstanding Mexican, who devoted a great part of his life to the cause of food, he stressed, I must mention particularly the wonderful relations that have ever existed between our peoples and governments, relations that have never been darkened.

Taking the prize, Prof Sofokli Lazri said that the pi'ze awarded to Albania by the institute is a great honor for her, for the persistent and creative work of its people. He also thanked regarding the evaluation for the results attained in Albania in the field of agricultural production. For us, the Albanians, he said, the fulfillment of the needs for food at home, is one of the greatest victories. In the past, one could not even think of it, because bread had never been ensured at home. This lack has also been a great source of poverty and suffering for the people and a serious obstacle to its general development.

/9274

CSO: 2020/89

#### ALIA GREETS TANZANIA'S MWINYA ON NATIONAL DAY

AU261408 Tirana ATA in English 0730 GMT 26 Apr 87

[Text] Tirana, 26 Apr (ATA) -- The president of the Presidium of the People's Assembly of the People's Socialist Republic of Albania, Comrade Ramiz Alia, sent the following message of greetings to the president of the United Republic of Tanzania, Ali Hassan Mwinya:

"On occasion of your national day, the Union Day, on behalf of the Albanian people, the Presidium of the People's Assembly and in my name, it is my pleasure to send you and through you to the friendly Tanzanian people the warmest greetings and best wishes.

"The Albanian people sincerely rejoice over the successes achieved by the Tanzanian people for progress and well-being and wholeheartedly wish them new, ever greater successes in the work for the all-sided development of their homeland.

"I am convinced that the friendly relations and the close cooperation existing between Albania and Tanzania will constantly develop and strengthen in the future too, in the interest of our two peoples and to the benefit of the struggle of the peoples against imperialism, neocolonialism and racism."

/9274

cso: 2020/89

ALBANIAN, SRV DELEGATIONS HOLD TALKS IN HANOI

AU261358 Tirana ATA in English 0740 GMT 26 Apr 87

[Text] Tirana, 26 Apr (ATA)--The delegation of the People's Assembly of the People's Socialist Republic of Albania, led by the chairman of the Presidency of this Assembly, Petro Dode, conducted talks with the delegation of the National Assembly of the Socialist Republic of Vietnam, headed by its chairman, Nguyen huu Tho.

During the talks the two sides evaluated the friendly relations existing between the two countries and expressed the desire for the further strengthening and development of the relations of friendship and cooperation between the Albanian people and the Vietnamese one and between the People's Assembly of the PSR of Albania and the National Assembly of the SR of Vietnam. Likewise, opinions were exchanged on some aspects of the present-day international developments.

Present in the talks was also the ambassador extraordinary and plenipotentiary of the PSR of Albania in Hanoi, Syrja Laze.

On 25 April the chairman of the National Assembly of the SR of Vietnam, Nguyen liuu Tho, gave an official dinner in honour of the delegation of the People's Assembly, headed by the chairman of the Presidency of this Assembly, Petro Dode. The dinner passed in a warm, friend'y atmosphere.

/9274 CSO: 2020/89

#### SRV'S TRUONG CHINH RECEIVES ALBANIAN DELEGATION

AU261353 Tirana ATA in English 0735 GMT 26 Apr 87

[Text] Tirana, 26 Apr (ATA)—The head of the State Council of the SR of Vietnam, Truong Chinh, received the delegation of the People's Assembly of the PSR of Albania headed by the chairman of the Presidency of this Assembly, Petro Dode.

The meeting was attended by Nguyen Xien, vice president of the National Assembly, as well as other Vietnamese high-ranking personalities.

The head of the State Council, Truong Chinh, said that the Vietnamese people rejoice over the successes of the Albanian people in the socialist construction of the country to make Albania a prosperous and happy country.

For his part, the chairman of the Presidency of the People's Assembly, Petro Dode, said that this visit is an expression of the friendship and collaboration between the Albanian and Vietnamese peoples and between our two countries. He wished the friendly Vietnamese people further successes in the construction work and national defence.

/9274

CSO: 2020/89

#### CAMI SPEAKS AT FILM STUDIO ANNIVERSARY

AU141013 Tirana ATA in English 0730 CMT 14 Apr 87

[Excerpts] Tirana, 14 Apr (ATA)—On occasion of the 40th anniversary of the creation of the Albanian cinematography, the Committee of Culture and Arts, the Writers' and Artists' League and the "New Albania" Film Studio organized a solemn meeting on 13 April.

Present were also the member of the Political Bureau and secretary of the Central Committee of the party, Comrade Foto Cami; the member of the Political Bureau of the Central Committee of the party and vice-chairman of the Council of Ministers, Comrade Manush Myftiu; the alternate member of the Political Bureau of the Central Committee of the party and first secretary of the District Party Committee, Comrade Pirro Kondi; the member of the Central Committee of the party and chairman of the General Council of the Democratic Front of Albania, Comrade Nexhmije Hoxha; the minister of education, Skender Gjinushi, and other comrades.

The meeting was declared open by the chairman of the Committee of Culture and Arts, Alfred Uci.

On behalf of the Central Committee of the party and Comrade Ramiz Alia personally, Comrade Foto Cami greeted.

It is a pleasure to all of us to take part in this memorable anniversary of our cinematography and to greet and wish wholeheartedly the great collective of our talented cinema workers for that precious service they render to the party and people with their nice films, which are permeated by the spirit of partisanship, said Comrade Foto Cami.

Forty years ago, a new branch of art, the  $\Lambda$ lbanian cinematography, was added to our national culture.

The spirit of partisanship, realism and militancy has pervaded and pervades all our cinematographic creativeness.

The ideas of the party, its magnificent program for the socialist construction, the teachings of Comrade Enver lioxha to carry into life this program became the backbone of our documentary and feature film.

Following this reliable road, our film is welcomed not only in our country, but it is also respected by the world progressive forces. A striking contrast exists between it and the bourgeois and revisionist cinematography, which has been plunged into a profound crisis, where crime, violence, terror, disintegration and degeneration prevail.

The party is confident that the precious experience accumulated by our cinematography will be enriched with new values, with works with a higher ideo-artistic level, honourably fulfilling the magnificent tasks set by the 9th Congress of the party, with worthy creations for the period we are living today. Therefore, on behalf of the Central Committee of the party and Comrade Ramiz Alia, I wish you to carry further your achievements, to raise higher the name of the Albanian cinematography, to make it ever more beloved for our people, a powerful and sharp weapon on the party for the communist education of the masses, Comrade Foto Cami said in conclusion,

The greeting was listened to attentively and was received with applauses.

Then Comrade Manush Myftiu took the floor who informed that the Presidium of the People's Assembly has awarded the decoration "Order of the Flag" to the "New Albania" film studio.

In this context a scientific session was organised in one of the halls of the Museum of National History and an exhibition was opened, which presented the road of the development of the Albanian cinematography.

/9274 CSO: 2020/89

#### BRIEFS

HEALTH MINISTER RECEIVES WHO OFFICIAL—Tirana, 16 Apr (ATA)—The director of the Regional Bureau of the World Health Organization (OMS) on Europe, Dr Jo Eirik Ansvall [spelling as received] is on a visit to our country. The minister of health service, Ahmet Kamberi, received Dr Jo Eirik Ansvall with whom he had a warm and friendly talk. Upon his stay in our country he has visited the cities of Tirana, Berat, and Durres, where he got acquainted with the work of health institutions. [Text] [Tirana ATA in English 0945 GMT 16 Apr 87 AU] /9274

CARCANI RECEIVES PRC, ALGERIAN ENVOYS—Tirana, 17 Apr (ATA)—The chairman of the Council of Ministers of People's Socialist Republic of Albania, Comrade Adil Carcani received in separate meetings on 16 April the Ambassador Extraordinary and Plenipotentiary of People's Republic of China Fan Chengzhuo and the Ambassador Extraordinary and Plenipotentiary of the People's Democratic Algerian Republic Rachid Haddad, accredited to the People's Socialist Republic of Albania. The Vice-Minister of Foreign Affairs Muhamet Kapllani was present at the reception. [Text] [Tirana ATA in English 1057 GMT 17 Apr 87 AU] /9274

ALIA GREETS SYRIA'S AL-ASAD--Tirana, 17 Apr (ATA)--The president of the Presidium of the People's Assembly of the People's Socialist Republic of Albania, Comrade Ramiz Alia, sent the following message of greetings to the president of Syrian Arab Republic, Hafiz al-Asad: "It is my pleasure that on occasion of the National Day of the Syrian Arab Republic, on behalf of the Albanian people, the Presidium of the People's Assembly and in my name, to convey to you, and through you, to the friendly Syrian people the ardent greetings and the best wishes. On this memorable day I wish your people fresh successes in the constant development and progress of the country and the strengthening of the homeland against the plots of imperialism and Zionism. I express my conviction that the friendly relations between our two countries develop still more in the future in the interests of our two peoples." [Text] [Tirana ATA in English 1003 GMT 17 Apr 87 AU] /9274

ALBANIA'S ALIA GREETS ZIMBABWE'S BANANA—Tirana, 18 Apr (ATA)—The president of the "President of the People's Assembly of the People's Socialist Republic of Albania, Comrade Ramiz Alia, sent the following message of greetings to the president of the Republic of Zimbabwe, Canaan Banana: "On occasion of the National Day, the 6th anniversary of the proclamation of the independence

of Zimbabwe, it is my special pleasure to convey to you and through you, on behalf of the Albanian people, the Presidium of the People's Assembly and in my name, the ardent greetings, as well as the best wishes of the Zimbabwe people for their wellbeing and further development of their country. I am convinced that the friendly relations which exist between Albania and Zimbabwe will continue to develop in the future too, in the benefit of our two friendly people's and to the good of the struggle against imperialism, neocolonialism and racism." [Quotation marks as received.] [Text] [Tirana ATA in English 1192 GMT 18 Apr 87 AU] /9274

ALIA RECEIVES ETHIOPIAN ANBASSADOR--Tirana, 21 Apr (ATA)--The president of the Presidium of the People's Assembly of the People's Socialist Republic of Albania, Comrade Ramiz Alia, received, on 20 April, the ambassador extraordinary and plenipotentiary of Socialist Ethiopia to the Prople's Socialist Republic of Albania, Mekkonnen Gizaw [spelling as received], who presented the credentials. Attending the ceremony of the presentation of the credentials were the minister of the foreign affairs, Reis Malile; the secretary of the Presidium of the People's Assembly, Sihat Tozaj; the director at the Ministry of the Foreign Affairs, Andon Berxholi, and the head of the protocol branch at the Ministry of the Foreign Affairs, Kostaq Cifligu. [Text] [Tirana ATA in English 0730 GMT 21 Apr 87 AU] /9274

PRK OFFICIAL THANKED FOR MESSAGE—Comrade Chea Sim, chairman of the National Assembly of the PRK, received a message of thanks from Comrade Petro Dode, president of the People's Assembly Presidium of the People's Republic of Albania. The message reads: I thank you for the message of friendly greetings you sent me on my election as president of the People's Assembly Presidium of the People's Republic of Albania. I avail myself of this opportunity to extend wishes for success of the Cambodian people in their efforts for construction and development as well as for the defense of their country's freedom and independence. [Text] [Phnom Penh Domestic Service in Cambodian 1300 CMT 24 Apr 87 BK] /9274

MINISTER MALILE RECEIVES WHO OFFICIAL--Tirana, 17 Apr (ATA) -- The Minister of Foreign Affairs Reis Malile received the director of the Regional Bureau of the World Health Organization on Europe, Dr Jo Eirik Ansvall [spelling as received] with whom he had a warm and friendly talk. Dr Jo Eirik Ansvall left our country on 16 April. [Text] [Tirana ATA in English 1059 GMT 17 Apr 87 AU] /9274

ALGERIAN VETERANS' DELEGATION ARRIVES--Tirana, 22 Apr (ATA)--On 21 April, a delegation of the Mujahidins of the People's Democratic Algerian Republic headed by the minister of Mujahidins, Mohamed Djeghaba, arrived on a friendly visit to our country at the invitation of the National Committee of the War Veterans of the Albanian people. [Excerpt] [Tirana ATA in English 0735 GMT 22 Apr 87 AU] /9274

DELEGATION LEAVES FOR SRV--Tirana, 22 Apr (ATA) -On 21 April, a delegation of the People's Assembly of the People's Socialist Republic of Albania, headed by the chairman of the Presidency of this Assembly. Petro Dode, left on an official and friendly visit to Vietnam, at the invitation of the chairman of National Assembly of the Socialist Republic of Vietnam, Nguyen Huu Tho. The delegation was seen off by the vice president of the Presidium of the People's Assembly, Khafer Spahiu; the minister of the foodstuff industry, Jovan Bardhi; the vice minister of the foreign affairs, Muhamet Kapllani, deputies and other comrades. The ambassador extraordinary and plenipotentiary of the Socialist Republic of Vietnam in Tirana, Le Ngoc Thanh, was present too.

[Text] [Tirana ATA in English 0730 GMT 22 Apr 87 AU] /9274

MEXICAN INTERNATIONAL FOOD PRIZE AWARDED--Tirana, 22 Apr (ATA)—The ceremony of awarding the international prize on food "Enrico Diaz Balesteros" for 1987, conferred on Albania for its achievements in ensuring food for the people was organised in one of the halls of the Ministry of Foreign Affairs, on 21 April. Attending were the chairman of the State Planning Commission, Niko Gjyzari; the chairman of the Committee of Science and Technique, Ajet Ylli; the chairman of the Albanian Committee for Cultural and Friendly Relations With Foreign Countries, Jorgo Melica; the vice minister of foreign affairs, Muhamet Kapllani, and other comrades. The director of the International Relations Study Institute, Prof Sofokli Lazri, made the speech on the occasion.

[Excerpt] [Tirana ATA in English 0740 CMT 22 Apr 87 AU] /9274

WREATHS LAID ON MARTYRS' GRAVES--Tirana, 5 May (ATA) -- On occasion of 5 May, the Martyrs' Day, the diplomatic corps accredited to the People's Socialist Republic of Albania, laid a wreath and paid homage to the Martyrs' Cemetery of the Nation and to the grave of the leader of the Albanian people, Enver Hoxha. Attending the ceremony on the occasions were the chairman of the Protocol Branch at the Ministry of Foreign Affairs, Kostaq Cifligu. [Text] [Tirana ATA in English 0750 GMT 6 May 87 AU] /9274

NEXHMIJE HOXHA ATTENDS HERO'S ANNIVERSARY—Tirana, 5 May (ATA)—On occasion of the 45th anniversary of the fall of the Hero of the People, Qenal Stafa, the Presidency of the Democratic Front and the Committee of the War Veterans of the district of Tirana organized a commemorative meeting in the Museum of National History, Attending were also the member of the Central Committee of the party and chairman of the General Council of the UFA [Democratic Front of Albania], Comrade Nexhmije Hoxha; the member of the Central Committee of the party, Filo Peristeri; the first secretary of the Central Committee of the LYUA [Albanian Union of Working Youth], Nehmet Elezi, the chairman of the Executive Committee of the District People's Council, Leandro Zoto and other comrades. [Excerpt] [Tirana ATA in English 0745 GMT 5 May 87 AU] /9274

OSLO UNIVERSITY RECTOR VISITS ALBANIA -- Tirana, 3 May (ATA) -- At the invitation of the "Enver Boxha" University of Tirana, the rector of Oslo University, Prof Inge Loning, paid a visit to our country. At the "Enver Boxha" University of Tirana he was received by the rector, Prof Osman Kraja. During the reception opinions were exchanged on the possibilities of cooperation in the field of education and science between the two universities. He also was received by the president of the Academy of Sciences, Prof Aleks Buda, and the chairsan of the Albanian Committee for Cultural and Friendly Relations With Foreign Countries, Jorgo Melica. During his stay in Albania, the rector of Oslo University visited the cities of Durres, Kruje, Berat and Gjirokaster, where he got acquainted with the achievements in the fields of economy,

education, culture and science. The Norwegian friend left our country. [Text] [Tirana ATA in English 0740 GMT 3 May 87 AU] /9274

HEALTH MINISTER LEAVES FOR GENEVA--Tirana, 4 May (ATA)—A delegation of PSR of Albania, headed by the minister of health. Almet Kamberi left for Geneva. It will attend the proceedings of the 40th session of the World Assembly of Health. [Text] [Tirana ATA in English 0755 GMT 5 May 87 AU] /9274

MEXICAN AMBASSADOR TRANSFERRED, LEAVES--Tirana, 5 May (ATA)--On occasion of his transferring, the ambassador extraordinary and plenipotentiary of the United States of Mexico to the People's Socialist Republic of Albania, Francisco Lopez Camara, left our country on 5 May. [Text] [Tirana ATA in English 0800 GMT 6 May 87 AU] /9274

GREEK CHEMISTS' ASSOCIATION PRESIDENT VISITS—Tirana, 23 Apr (ATA)—At the invitation of the Academy of Sciences, Prof Dr Khristos Verelis, president of the Greek Chemists' Association and general director of the state oil refineries of Greece, together with Dr S. Zahariadou paid a visit to our country. They were received by the minister of energetics, Lavdosh Ahmetaj and the chairman of the Committee of Science and Technics, Ajet Ylli, with whom they exchanged views about the scientific problems of the mutual interest. During their stay in our country, the Greek guests visited scientific and cultural institutions in the cities of Tirana, Korce and Durres. Prof Dr Khristos Verelis and Dr S. Zahariadou left our country. [Text] [Tirana ATA in English 0755 GMT 23 Apr 87 AU] /9274

GREEK PREFECTS VISIT DURRES, SARANDE--Tirana, 29 Apr (ATA)--During these days, the prefect of Kerkira, Manolis Kokinos and the prefect of Thesprotias, Takis Skalsas paid a visit to our country at the invitation of the Albanian Committee for Cultural and Friendly Relations With the Foreign Countries. They visited sociocultural centres in some of the districts of our country. In Durres and Sarande, the Greek guests were recieved by the chairmen of the Executive Committee of the People's Council of these districts, Isak Shehu and Stefan Qirjako. They were also received by the chairman of the Albanian Committee for the Cultural and Friendly Relations With Foreign Countries, Jorgo Melica, who conducted a warm and friendly talk with them. The Greek guests left our country. [Text] [Tirana ATA in English 0740 GMT 29 Apr 87 AU] /9274

LUSHNJE LAND REFORM MONLMENT INAUGURATED—Tirana, 4 May (ATA)—The main theme of today's newspapers is the inauguration yesterday in the City of Lushnje of the monument "Our Land" devoted to the two most important events of the development of the socialist revolution in the countryside: agrarian reform and collectivization of agriculture, that were carried out under the people's power. In the chronicle issued on this occasion it is informed on the rally organized in this city which was attended by Foto Cami, member of the Political Eureau and secretary of the CC of the party; Vangjel Cerrava, alternate member of the Political Eureau of the CC of the party and vice-chairman of the Council of Ninisters, and other comrades. Those present at the rally were greeted by the minister of agriculture, Themie Thomai, on behalf of the CC of the party and the Council of Ninisters, [Excerpt] [Tirana ATA in English 0755 GMT 4 May 87 AU] /9274

CARCANI RECEIVES EGYPTIAN TRADE UNIONIST—Tirana. 11 Apr (ATA)—The chairman of the Council of Ministers of the People's Socialist Republic of Albania, Comrade Adil Carcani, received on 10 April, the President of the General Trade Unions Federation of Egypt, Sand Mohammed Ahmed [spelling as received], with whom he had a friendly talk. Comrade Adil Carcani expressed his satisfaction over the close and friendly ties existing between the Albanian people and the Egyptian one and wished that they develop and strengthen still more in the future, in favor of our two friendly countries and peoples. Attending the reception were the President of the General Council of the TUA [Trade Unions of Albania] Sotir Kocollari, and the vice minister of foreign affairs, Muhamet Kapllani, Present was also the charge d'affaires a.i. of the Embassy of the Arab Republic of Egypt in Tirana, Ihab hamuda [spelling as received].

[Text] [Tirana ATA in English 1055 GMT 11 Apr 87 AU) /9274

LGYPTIAN TRADE UNIONISTS ARRIVE—Tirana, 8 Apr (ATA)—At the invitation of the General Council of TUA [Trade Unions of Albania] a delegation of the General Trade Unions Federation of Egypt headed by the President of this federation Said Muhammad Ahmad arrived in our country on 7 April. The delegation was welcomed at the airport by the President of the General Council of TUA Sotir Kocollari and other comrades. Present was also the interim charge d'affaires of Egypt in our country Ihab Hamadah. [Text] [Tirana ATA in English 1022 GMT 8 Apr 87 AU] /9274

EGYPTIAN TRADE UNIONS DEPART--Sa'd Muhammad Ahmad President of the General Trade Unions Federation of Egypt, who visited our country at the invitation of the General Council of the Albanian Trade Unions left our country today. He was bid farewell at the Han i Hoti border station by Shpresa Nako, secretary of the General Council of Albanian Trade Unions. Yesterday, the delegation of the General Trade Unions Federation of Egypt paid homage and placed bouquets of flowers at the Mother Albania Monument and on Comrade Enver Hoxha's grave at the Martyrs of the Nation Cemetery. During its stay in our country the delegation was recieved by Jovan Bardhi, minister of the food industry, and visited centers of work and production in Tirana and the Skenderbeg Museum in Kruje. [Text] [Tirana Domestic Service in Albanian 1800 GMT 11 Apr 87 AU] /9274

LEADERS ATTEND FILM AWARD PRESENTATION--Tirana, 19 Apr (ATA)--The 7th Albanian Feature Film Festival, organized in the context of the 40th anniversary of the creation of Albanian cinematography ended in Tirana on 18 April. The Albanian Radio-Television organized a festive evening party in the Opera and Ballet Theater on occasion of declaring the winners of this festival. Present were also the member of the Political Bureau and secretary of the Central Committee of the party, Comrade Foto Cami: the member of the Political Bureau of the Central Committee of the party and vice-chairman of the Council of Ministers, Comrade Nanush Myftiu; the chairman of the Committee of Culture and Arts, Prof Alfred Uci; the chairman of the Writers' and Artists' League, Dritero Agolli, etc. [Excerpts] [Tirana ATA in English 0745 CMT 19 Apr 87 AU] /9274

CSO · 2020/89

POLITICAL HUNGARY

#### GASPAR INTERVIEWED ON EAST BLOC LABOR DEVELOPMENTS

Oslo FRIHETEN in Norwegian 24 Mar 87 p 7

[Article by Bjorn Johannessen: "The Soviets Are Not Copying Hungary"; the first paragraph is the FRIHETEN introduction]

[Text] "The Soviets are not copying Hungary's model for economic reforms. We carried out our reforms approximately 30 years ago based on Hungarian reality. Now the time is ripe for reforms in the Soviet Union. They must begin with Soviet reality." So said Sandor Gaspar, the head of the Hungarian Federation of Trade Unions, at a recent Oslo press conference.

At the invitation of the Norwegian Federation of Trade Unions, a delegation from the Hungarian trade union organization SEOT recently visited Norway. The visit returns one the Norwegian Federation of Trade Unions made to Hungary last year. During its visit, the delegation had political conversations with the leadership of the Norwegian Federation of Trade Unions, several trade union leaders, and the prime minister. The aim of the visit is to exchange common experiences on peace work and strengthen East/West contacts. "The Norwegian side puts great weight on the visit, and the conversations have confirmed its usefulness," said Kaare Sandegren, international secretary of the Norwegian Federation of Trade Unions.

In addition to being head of the Hungarian Federation of Trade Unions, Sandor Gaspar is on the Politburo and is the vice president of Hungary. He is the chairman of the World Trade Union Federation (the Communist international trade union), whose headquarters are in Prague.

Solidarity And Yugoslavia

Gaspar was asked what he thought of "Solidarity" in Poland and the current strike conditions in Yugoslavia. "I do not believe the demands of 'Solidarity' got carried out in either a capitalist or a socialist country. I won't go into the reasons behind the creation of 'Solicarity.' These I assume are well known. But the Polish workers were dissatisfied with conditions and with the old trade union organization. 'Solidarity' lost an important historic opportunity because its leaders had political ambitions and wanted to give the movement political functions instead of concentrating on

trade union tasks. 'Solidarity' did not take the history and traditions of Polish society into consideration," Gaspar said.

The Right To Strike Is Important

With regard to Yugoslavia and the strikes, Gaspar said that each workers must have the right to strike when all other means have been tried. He did not wish to say if he supported the strikes in Yugoslavia because his knowledge of the specific conditions was too poor. Behind the strikes in Yugoslavia is the authorities' wish to introduce a wage freeze even if prices rise.

"Yugoslavia's experiments with worker management of businesses is interesting to the entire international worker movement. The attempts were honorable and well meaning. But they may not have yielded the expected results. There are two mistakes a trade union movement should never make." Gaspar said.

The first is to build into its program elements which are not found in the real world. The second is not seeing that the time is ripe for introducing elements for fundamental changes. Then the trade union movement loses its historic opportunity. The time may not have been ripe for the introduction of self-management of businesses in Yugoslavia, said the head of the Hungarian Federation of Trade Unions.

"Currently we are doing preventive work to avoid unemployment. We are shifting workers around and retraining them. But in our country this occurs according to plan," he said.

12789 CSO: 3639/46

SWEDISH DAILY PROFILES JERZY URBAN, DOMESTIC SITUATION

Stockholm SVENSKA DAGBLADET in Swedish 5 Apr 87 p 9

[Article by Lars Ostberg: "Poland's Official Provocateur"]

[Text] On 13 December 1981 the defense minister of Poland and new first secretary of the Communist Party, General Wojciech Jaruzelski, took over the post of prime minister and established a state of emergency. Thereafter came several years of isolation in the international community.

Poland, with its 37.8 million inhabitants, stood behind small countries such as Hungary and upstarts such as East Germany.

This year for the first time Warsaw has regained its place as a capital on the diplomatic map of Europe. Wojciech Jaruzelski has put aside his uniforms and his title of prime minister. He has visited both Paris and Rome, where he was also successful in getting the Pope to make his third visit to his homeland. He preceded Eric Honecker to Peking as the first European socialist leader. At the same time he has diligently cultivated contacts with Sweden through cabinet secretaries and ministers. Representatives of Poland's new trade unions have even visited Sweden at the invitation of the Riksdag. And tomorrow Jaruzelski's spokesman Jerzy Urban is coming to Stockholm to explain the policies of the regime.

Almost exactly five years ago another of Jaruzelski's advisors was here for the same purpose. Then it was the well-mannered journalist Wieslaw Gorniki, who worked in Washington for several years and learned how the capitalist press works. Now Gorniki remains at home while Jerzy Urban dominates the scene, which he has been doing more and more in recent years.

#### Regained Prestige

It is an indication that Poland believes that it has regained its prestige, as is befitting for a country which occupies three percent of Europe's land. (Both Sweden and Finland are actually larger, but Poland is Europe's seventh largest country.)

Jerzy Urban is 54, and has been a journalist for 25 years at home in Poland, where he has been published in political newspapers. In Poland, as in most

socialist countries, journalists have significantly greater influence than in the capitalist world. Jerzy Urban's star was ignited in October 1956 when, under Gomulka, he began to write in the newspaper PRO POSTU, which, typically for Urban, means "Straight to the Point." It went down, as did Gomulka, and Urban went to the respected newspaper POLITYKA, the chief editor of which was Vice Prime Minister Rakowski. After diligently telling the Poles what they should do and how they should live, both under his own name and several pen names—the latest was Jan Rem—he became Jaruzelski's spokesman in 1971 with the task of teaching the foreign press the same things.

Jerzy Urban does not allow himself the benefits of learning how a free press works. He speaks no foreign language—or does not allow himself to do so—not even Russian. He uses an interpreter, giving himself additional time to think up answers to unpleasant questions. But he does not bother with trying to be smooth. He is the brutal type who goes right to the point, saying exactly what he thinks, often spiced with irony. He is ready, like Khrushchev, to take off his shoes to emphasize a point by pounding on the table.

His comment was typical when the Swedish truck driver was arrested, suspected of smuggling illegal goods in Poland in November. It was directed at Swedish journalists in general and SVENSKA DAGBLADET in particular:

"We have a true, genuine truck to show you, in contrast to your presumed espionage trucks."

#### Popular Buffalo

Jerzy Urban is a buffalo which foreign correspondents in Warsaw have learned to like. Perhaps be use, despite his Jewish birth, he is the prototype of a Polish nationalist. He does not like the International Monetary Fund and international trade unions and he shows it, because he knows what they think about Poland, and they will not think otherwise no matter what he says. He does not like the western world, and he knows that the world needs Poland under the existing political circumstances. In the same way as the monetary fund and the big banks are giving Poland new loans to get the old ones repaid, or at least the interest.

Jerzy Urban has convinced Jaruzelski that it is not good to be on the defensive. What does the Polish government care about what capitalistic editorial writers think about the frequent price increases in Poland? It is of course the International Monetary Fund and the World Bank that demand these in order to give loans. And there will be sharp price increases. Poland still has a long way to go to reach a balance between wages and production

Poland owes about 35 billion dollars to countries and banks in the West. The interest is about 3 billion dollars per year. Since the income in western currency is not large, Poland cannot pay more than half of the interest, even with the best intentions in the world. (However we are not, like Brazil, thinking of refusing to pay, said Urban. It is understood that Poles are gentlemen.) So last year about 600 western banks agreed to loan an additional 1.6 billion dollars to Poland in the hope that new investments would increase Poland's exports and credit worthiness.

#### Large Wage Increases

The terms are difficult. Merely raising prices will not get rid of subsidies. At the same time wages must be held down and the employees' interest in increasing production must be raised. Last year wage increases amounted to almost 20 percent. This year it was planned to hold them at 12 percent. But already the government has been forced to give in—"but only for the low wage earners"—and wage increases are expected to be about 19 percent this year. At the same time the government, which now consists of many economists, with Prime Minist: Zbigniew Messner at the top, is back on the question of price increases. In order to avoid disturbances the government negotiated for several months with great publicity about the coming price increases.

What previously caused disturbances in Poland was that the necessary price increases were withheld until every 10th year. Naturally by then they were enormous. Now prices are being raised successively during recent years, which does not make the increases any less, but makes them easier to bear it is hoped.

Food is now about 10 percent more expensive, vodka 20 percent, cigarettes 15, gasoline and gas 25, electricity 23 and coal 50 percent more expensive. In return, nothing is rationed except meat. But not really. When one has used up his meat ration he can go around the corner to another shop where sausage or ham costs more. It is rationing by wallet. One must realize that Poles largely live on meat and sausages. Fish is a delicacy for Christmas and other special occasions.

It was planned to raise prices by 25 percent this year and keep the wage increases at 12 percent. But it is not working out. "We are paid poorly, therefore we work poorly." Alfred Miodowicz, leader of the new trade union OPZZ said:

"Why can't we Poles, who have great potential at our disposal, use it to quickly overcome our difficulties? We are quite well educated, there are many among us who are enthusiastic. Poles are a hard working people, and it is not true that Polish workers just want to take a beer and a nap at the work place."

#### Poor Organization

According to Miodowicz the fault lies in poor organization of society and economic life. The simplest things are complicated to be devil the people. Unskillful administration, lack of competence and rationality in the organization of work are the causes of many of the difficulties of daily life. "We are used to it," said Miodowicz, "but in the long run it can neither be defended nor tolerated."

It was the lack of efficiency, leadership and organization which primarily caused Solidarity's opposition to the system, plus corruption. The lack of consumer goods was not the direct cause. So the latest price increases did not cause serious disturbances. Especially since they should reasonably lead

to increased food production. For several years it has been profitable to be a line in Poland. Last year production of both milk and meat increased. There the percent more animals slaughtered last year than in 1985, and food processed by 16.5 percent.

Sales of sumer goods increased by as much as 27.2 percent, which seems like t should be compared with previous shortages. In any case the statistic hat Poles have money, despite price increases. That is a continuous of the price increases that it inflation. They say to call it that in socialist countries, who call it inflation. They say to call it that in socialist countries, where increased buying power, which is what the consumers suffer from without knowing it, should not extend to preve goods. But in Poland the consumers are paying for previously in the land of the West, from where they borrowed money. In that connect the poles do not have a feeling that they are contributing to the balance of paraents deficit. But the imports were not so much consumer goods as raw majorials and equipment for industry.

#### Dwellings and Environment

If one can believe their leaders, the main issues for Polish workers today, 80 percent of whom are the same ones who were active within Solidarity, are the housing shortage and environmental pollution. More and more Poles are moving from the countryside to the big cities. Yet housing construction has not noticeably increased.

Poles have become tired of environmental pollution. As in most socialist countries the increase in production is most important. Bosses are only interested in fulfilling the five-year plans or in getting a bonus for overproduction. They do not expect to remain in power for more than 10 years, which has so far been the usual period between upheavals in Poland. What do they care about the environment? After them, the deluge, but then they are no longer responsible.

Now there have started to be demonstrations for environmental protection. Demonstrations have taken place in Lublin, Wroclaw and Gdansk. The reason is that Poland is getting its first nuclear power plant. It will be built in Zarnoweic in southern Poland and be ready in a few years. But even before Chernobyl it was a joke that Poland was getting old Russian technology of the 50's in its first nuclear power plant in the 90's. After Chernobyl it is now serious.

The protests also apply to the pollution from industry. The new union demands that that the government get responsible heads for the respective departments who can better plan new industrial projects. As the issue is dealt with now, as soon as money is short environmental protection gets cut. Which only makes the situation worse, according to the union.

That is how much free speech we have in Poland, said Urban, provoking the journalists. And pointing out that among the socialist countries in Europe, Poland has the greatest freedom of expression, the greatest legal security and the greatest freedom to travel abroad. But he really did not compare freedom

in the West and in the East: according to the socialist view the capitalist press is not at all free. It is of course owned by economic interests.

Jerzy Urban's goal in life is to get western journalists to be more objective. To that end he does not hesitate to recommend that Swedish journalists look at Poland with Polish eyes, not Swedish, which he finds rather hypocritical. He probably feels that way because of the Swedes he has met during his week in Sweden.

Jerzy Urban loves to go on the offensive.

9287

CSO: 3650/114

POLITICAL POLAND

#### SATELLITE TV, VIDEO IN TERMS OF 'PROPAGANDA MODERNIZATION'

Academic Views Future of 'Information War'

Warsaw SZTANDAR MIODYCH in Polish 7-9 Nov 86 p 3

[Interview With Prof Leslaw Wojtasik by Krzysztof Pilawski; date and place not given]

[Text] [Question] Professor, lately the concept of an information war has been making the rounds. Can you decipher that concept?

[Answer] The term first made its appearance some time ago, but right now it is especially significant. It is linked with modifying the Western concept of combating socialism. To date, the main role in the struggle against socialism has been the military element. But in view of the military parity between NATO and the Warsaw Pact that has been maintained for years, especially between the Soviet Union and the United States, this concept has come to naught. In association with this, the idea arose to use an element in the struggle against our system in which the West has an advantage over us.

[Question] Information was selected. Why?

[Answer] During the last 50 years, information, if one can express it so, has been extremely successful. It has become one of man's basic needs. It is an important instrument in the political struggle. Already in 1975 the United States controlled or had at its direct disposal two-thirds of the world's technological resources used to transmit information. To date, this situation has not changed very much. The United States and the other highly developed capitalist countries have managed to extend their own kind of information umbrella over their societies. The multiplicity of transmission techniques and their numerous forms means that our information does not penetrate their countries to a very large extent. On the other hand, a massive propaganda attack can be conducted under the information umbrella. It is being associated unintentionally with the SDI program whose goal is to construct over the capitalist countries an umbrella that is impenetrable by our strategic weapons. However, right now SDI is only an idea, but the information umbrella is a fact.

[Question] The development of technology creates completely new possibilities regarding the influence of Western propaganda in the socialist countries. I think satellite will play the greatest role.

[Answer] Right now one can view over 20 Western programs with the aid of antennas that are not too complicated. This number will increase if the two additional French-FRG telecommunications satellite are launched as planned in the near future.

[Question] When will we be able to view Western programs without using special antennas?

[Answer] It is a matter of several years. Simply stated, it is a matter of installing transmitters on satellites that are sufficiently powerful. Covering Poland with Western TV elicits the concept of creating something like a 'TV Free Europe.' It should be added that the TV programs to be broadcast by the French and West German satellite will be sold to private subscribers. In association with this, the state will not be responsible for the information broadcasted via these programs. But I think that propaganda attacks via satellite TV do not pose the greatest threat.

[Question] Can we expect that in the future 'TV Free Europe' will be jammed just as radio is jammed?

[Answer] That is an impossible engineering endeavour. Besides, jamming is ineffective. Not only is jamming ineffective but is also is superfluous. Of course, it is easy to issue a bunch of prohibitions, but why? They could become rang. We must create an alternative program. That is the primary method of counteracting the influence of propaganda aggression. Relative to TV, I believe it is the easiest. On the other hand, objectionable information transmitted via video and personal computers, is much more objectionable.

[Question] But are not both of these information transmission resources much more apolitical?

[Answer] Only outwardly. In our country there are about 500,000 VCRs and 300,000 personal computers that are privately owned. In using these devices, it is possible for an owner to personalize information selection to suit his own tastes and expectations. Speaking fuguratively, the problem is that Poland does not produce the products that 'feed' these devices, that is, video recordings and computer programs. Certain receptive channels to transmit information have been created that remain beyond all state controls.

[Question] But is it not that way in other countries?

[Answer] That is a myth. Every state excercises control over its information transmission system. Of course, the forms of this control vary and at times are very discrete. We talk about educating our children to strive for peace; we have presented a complete concept at the United nations forum, while a completely different model for upbringing young people is dominant in the West, an upbringing that accepts force and war. This tendency is quite obvious in computer programs. Many programs involve military actions carried out on

the territories of the socialist countries. Consider the proverbial 'Raid on Moscow.' These programs are also reaching our country. They influence young people 10 to 15 years old whose critical judgments are still limited.

[Question] From what you say, professor, it turns out that technology is not our best ally. New sources for transmitting information are being linked almost exclusively with threats.

[Answer] One should not present the matter that way, that is, that the VCR and computer are our enemies. They are our enemies only when we do not use them for our education goals. This technical base creates a tremendous opportunity for us to magnify the influence of information. We only have to direct this process more intelligently. I spoke about the need to create our own altenative program. Of course, the concern here is not about responding with a 'Raid on New York.' It is possible to use the attractiveness of the new transmission techniques in many ways without resorting to such primitive tricks.

[Question] I agree with your intentions, but I doubt they can be realized realistically. The activities you speak about require huge resources. Where will these resources come from?

[Answer] That question is somewhat dramatic. We function continuously under certain crisis conditions. It seems to me that the main task now is to utilize rationally those resources at our disposal. Right now much is wasted in Poland. Of the 30 films produced last year, only several were profitable; billions of zlotys were lost on the unprofitable films. Should we sink additional billions in unsuccessful projects or should we designate this money, for example, to produce our own computer programs and videos. A decision must be made. At this moment it is indispensable.

[Question] I think cooperation among the socialist countries should play an important role in meeting the information chanllenge. The foundations are already in place. Starting next year Warsaw's residents will be able to view the first Soviet TV program. When can we expect to receive all over Poland all socialist country TV programs?

[Answer] It is quite obvious that if we want to counteract Western information attacks via an alternative information method, then cooperation among the socialist countries is indispensable. We are not able to cope with this problem on our own because we lack the power and resources. I imagine that in due time a communication satellite wil be placed in orbit that will permit all socialist countries to receive all socialist country programs. But this is a very complicated problem. The socialist countries, like almost all developing countries and even some Western countries, support sovereignty of information. This means other countries may not transmit their information in the host country without the host country's permission. Thus, a final agreement must be concluded before a satellite can be orbited.

[Question] A somewhat exaggerated picture of the role of information in the modern world has emerged from our discussion. After all, the problem of an information war, which we are discussing, has been in existence for many years

in the FRG. Using this example, it is obvious that information will not dismantle socialism.

[Answer] I have no doubt about that. With the help of information one can expect only some changes in people's support of socialism. And those are our opponent's plans. One should not describe the role of this activity as demonic. I would like to focus attention on two things. First, our society is different from Western society. This is not to say that we have shaped new moral sterectypes over the past 40 years. Poles do not accept coercion, force and pornography, which are so popular in the capitalist countries. Second, for years our information policy has been based on openness. All that was progressive, good and new in the West was also disseminated in our country. Thus, the planned information war will not come as a qualitative shock to Poles. What is more important, speaking generally about shock, it will be quantitative.

[Question] Will we always be the passive side in this information war? Will we use modern transmission techniques to popularize our system in other countries?

[Answer] It is certain that our culture contains many values worthy of greater representation. However, I do not believe we will design a program in the immediate future to popularize socialism via satellite TV or video. We must concentrate attention mainly on internal activities. But our crisis will not drag on for years. When we settle the crisis, we will be active in the international arena.

#### PZPR CC Propaganda Commission Discusses TV Role

Warsaw TRYBUNA Ludu in Polish 29 Jan 87 p 2

[Article by Izabella Waszczak: "Satellite TV--A Subject For Today or Tomorrow?"]

[Text] Members of the PZPR CC Commission on Propaganda Affairs held their first meeting on January 29. Jan Glowczyk, CC secretary and Polithuro member, is the commission chairman. The CC did not form last term a commission that would have dealt with propaganda problems. In addition to satellite TV, its prospects for development and the threats associated with it, the very concept of propaganda and, in this context, the work of the commission were discussed at the first meeting, already a working meeting.

A Commission Presidium was selected, with Jerzy Majka, TRYBUNA LUDU chief editor, as its vice chairman and Jozef Barecki, director of the PZPR CC Propaganda Department, as its secretary. Members of the commission also include Wladyslaw Gontarski, a Port Gdynia foreman; Mieczyslaw Rakowski, vice marshal of the Sejm; Zbigniew Sobotka, first secretary of the Warsaw Metallurgical Mill Plant Committee; Jerzy Szmajdzinski, chairman of the Main Administration of the Union of Socialist Polish Youth; and Slawomir Tabkowski, chief editor of GAZETA KRAKOWSKA.

Opening the first meeting of the commission members, J. Glowczyk discussed the status of propaganda in the social and political life of states, especially in Poland. Referring to the deliberations of the central committee secretaries of the socialist countries that was held recently in Warsaw, he emphasized the grave times in which the socialism countries find themselves. Even if many things are decided in economic terms, there exists, of course, feedback regarding propaganda. Using this feedback positively is one of the most important functions of propaganda. Referring to the main topic—satellite TV, J. Glowczyk reminded his listeners of the trends that have appeared to date in press publications. He emphasized that, in speaking about satellite TV, one must not neglect the need to make qualitative changes in mass media operations. A good, attractive form promotes the perception of worthwhile content.

During the discussion, referring to the various threats perceived in satellite TV, the obliteration of cultural identity is the most serious threat. Proof of this are the examples from several Western countries which after several years of subscribing to this TV are now seeking ways of selecting and limiting reception of 'satellite pap' by their people.

According to commission members, today it is necessary to think about the future, including the development and selection of the most economical engineering solutions. However, this does not mean we should not improve what we already have, including existing radio and TV programs. Criticisms and evaluations of TV programs and newspapers, including ours, were also made made. It was observed that, among other things, letters and correspondence from readers were printed more profusely and more frequently. These current evaluations served as examples that interesting things can be written and done when one wants to, increasing the number of subscribers and readers.

The meeting participants also agreed that in modernizing propaganda methods one should be concerned about the quality of information so that it should be current, interesting and comprehensive.

The following participated in the discussion: Leslaw Wojtasik, Czeslaw Mojsiewicz, Slawomir Tabkowski, Norbert Krawczyk, Albert Kosowski, Julian Kraus, Stanislaw Kosicki, Wladyslaw Korczak, Jerzy Fiedosiejew, Jerzy Majka, Wieslaw Rudygier and Zdzislaw Rozbicki.

The commission believes that it is urgent to develop an integrated program to expand Polish satellite TV that takes into account, among other things, the agreements concluded within the CEMA framework.

It was agreed that the subject of the next meeting will be information concerning editorial staff Primary Party Organization meetings that were held after the 10th Congress concerning the forms and methods of propaganda activity.

# PZPR Ideology Seminar on Video Role

Warsaw TRYBUNA LUDU in Polish 17 Feb 87 p 4

[Article by Jerzy Koziol: "There Is No Turning Back From Video"]

[Text] The success of party ideological and propaganda activities is determined by propaganda content as well as how it is transmitted. This obvious fact, especially now when the party political education system is expanding in ever increasing circles and is being supplemented by new forms of training, takes on special meaning.

The all-Polish seminar of voivodship directors of PZPR centers for ideological training that was held in Chancz, near Staszow, was dedicated to the use of modern audio-visual techniques in idoelogical-propaganda work. Henryk Bednarski, CC secretary, participated in the seminar. It turned out that the techniques are nothing new for many centers. Video techniques have been in use for several years now in many voivodship centers as excellent and enhancing training aids.

This was demonstrated by voivodship center for ideological indoctrination directors from Torum, Czestochowa and Tarnobrzeg. Possessing video equipment with a camera, these centers produce their own programs that are use later on during training activities, record TV programs and document events that are of regional importance. This equipment is also an excellent aid for training lecturers and instructors. It enables them to improve their skills and to correct pronunciation and gestulation errors before appearing in front of students.

The meeting hosts, the workers of the PZPR CC Ideological Indoctrination Department in Tarnobrzeg, also demonstrated how microcomputers can be useful in organizing and conducting training work.

Microcomputers can be used, among other things, to check student knowledge, to maintain various kinds of records (lecturer and instructor records, library data, training add records and so on) and to gather and transmit information quickly. The exchange of experiences and mutual aid among centers can be efficient and fast, thanks to this modern technology. In its simplest form, it leads to the exchange of programs recorded on video cassettes. The Tarnobrzeg and Nowy Sacz centers are involved in such cooperation.

The new audio-visual equipment provide numerous advantages. However, its role should not be unduly magnified, stated many of the seminar participants. It will not replace people who are well prepared and really involved in ideology-propaganda work among party activists. However, looking at it from another viewpoint, there is no turning back from video, which was also emphasized at the seminar.

The PZPR CC Ideology Department will attempt in the very near future to create a center for preparing cassettes on lecturer and instructor lessons. sociopolitical themes, training aid programs and instruction on methods of conducting classes.

11899 CSO: 2600/449 MILITARY

# MAJOJ MILITARY JOURNALS PUBLISH TABLES OF CONTENTS FOR 1986

## Military Technology Journal

Warsaw WOJSKOWY PRZEGLAD TECHNIZNY in Polish No 12, Dec 86 pp 565-568

[Excerpts] Electronics and Communications

Microwave Acoustics and Radar: B. Kaminski: No 12:

Logarithmic-periodic Antennas For Tropospheric Communications; J. Bresinski and R. Bulge; No 11;

The AP-82 Telephone; E. Wirkus; No 1;

Analysis of Electronic Equipment Compatibility; W. Aloksa and W. Sznajzycht; No 10:

Pushing Casing Pipes Without Digging Trenches; J. Boruta, M. Krawczyk and R. Kubacki; Nos 7-8;

Electrically Insulated Blocks: B. Bany: No 3:

Digitation of Analog Radio Devices; A. Kubacki; No 9;

Detectors of Phosphorus-Organic Toxic Agents; A. Mierzwinski and Z. Witkiewicz: No 4:

ECW-64B Electronic Rural Telephone Exchange; T. Topolewski, W. Radzikowski and M. Pawlaczyk; No 12;

Voice Communication Petween Man and Machine; E. Wirkus; No 9:

Simulators of Badar Surveillance Situations; S. Janke and B. Jakubowski; No 12;

Inertial Navigation Devices; A. Gebura; No 7-8;

Developments in Laser Range Finders; No 10;

Bringing Computers Closer to Users: J. Konopka: No 1:

Computer Graphics Simulation; J. Konopka; No 2;

Ketrological Laboratory PLIT-AR; No 9;

Charging Silver-Zinc Batteries; L. Gluski; No 3;

Satellite Communications; T. Petkowicz; No 4 and No 11;

MCY 7880; F. Baginski;No 10;

Microwaves in Military Technology; B. Stee; No 12;

Microcomputers--Status and Prospects; U. Stanissewski; No 10;

Modernization of Technical Propaganda Assets; U. Staniszewski; No 3;

Interface for ZX Spectrum Microcomputer and DZH-180 Printer; M. Mizeracki, K. Fedyna and A. Cieplinski; No 10;

New Audiovisual Equipment; U. Staniszewski; No 4;

Protection of Madio Communications by the Spectrum Dispersion Method; M.Suchanski; No 11; Designation of Radio Emissions; E. Golan; No 9; Infrared Rays in Military Technology; J. Kilias; No 12; Field Cable and Optical Fiber Lines; Z. Baranowski and Z. Tadeusiak; No 9; Field Electricity Generators; J. Pieta; No 12; Progress of Cryptology; J. Pawelec: No 9: Surface Assembly of Electronic Sub-circuits; R. Florynski and S. Ferus; No 9; Issues of Communications Security; J. Hajdak; No 9; Electronic Search Radars; W. Kanka and A. Halista; Nos 7-8; Electronic Proximity Detonators; K. Zimonczyk and M. Bozplochowski; No 1; Satellite Reconnaisance; W. Derkacz; No 3; Dispersing Satellite Television; W. Kolosowski and H. Drozdz; No 12; Integrated Circuit Development; J. Konopka: No 3: Satellite Navigation System; W. Derkacz; No 5; Optical Fibers in Field Communication Systems; P. Jachura and J. Skocinski; No Computers in Tactical Reconnaisance; J. Januchowski; No 10; Equipment for Putting in Cable Lines; E. Okon and A. Sadomski; No 1; Use of Batteries in Winter: Z. Jarentowski: No 1: Modern Ultra-shortwave Receivers; M. Miller; No 9; Modern Ship Radars; M. Kukulka; No 1; Inventions and Innovations in the WIL [Military Communications Institute]; A. Korzeniewska and T. Novicki; No 9; Protecting Batteries from Overcharging; T. M. Landa and W. Szpak; No 2; Radio Station Generator; A. Lownicki and W. Badowski; No 1; Automated Communications and Command Systems; Z. Klimek; No 5; Integrated Aircraft Flight and Weaponry Controls; J. Grzegorzewski; No 3; The Importance of Military Communications; H. Andracki; No 9; Thirty-five Years of the Military Communications Institute; B. Petryga; No 9; Aviation Technology Cost-effective Utilization of MK-8P Oil: L. Luczak: No 2: Cost-efficiency of Aircraft; J. Perlinski; Part 1 - No 1; Part 2 - No 2; Part 3 - No 3:

I1-20; W. Stech: No 6; Inertial Navigation Systems; A. Gebura; Nos 7-8; Sandwich Constructions; J. Godzimirski and M. Przybylski; No 1; Control of Thermoelectric Thermometers; F. Pawelek, Z. Kowalkowski, P. Kowalkowski and P. Koniorozyk: No 3: Guided Aerial Bombs; J. Grzegorzewski; No 4; Flying Passion of the Zurakovski Brothers; T. Chwalczyk; No 2; Airfield Systems of Aircraft Braking; P. Szuster; No 4; Painting the Aircraft; J. Turek and W. Pochylaki; No 1; Small Pilotless Drones; E. Sobecki; Nos 7-8; Airfield Vehicles; S. Konopka and J. Krasucki; No 12; Radioisotopic Methods in Aviation Technology; J. Lewitovicz; No 3; Mi-26; No 10; Repairs of Sandwich Constructions; J. Godzimirski; No 2; Airfield Surfaces from Pre-stressed Slabs; M. Graczyk and P. Nita; Nos 7-8; Designing Safe Helicopters; A. Olejnik and K. Sibilski; Mos 7-A;

Draft of the TS-16 "Grot" Polish Aircraft; W. Stech; No 6;

Soviet Combined Propulsion Aircraft; W. Stech; No 11;

LWS-3 "Mewa" Aircraft; T. Chwalczyk; No 5;

Increased Maneuverability Aircraft; P. Zalevski; No 2;

Srike Alreraft SU-25; W. Stech; No 6;

Lim Aircraft; P. Butowski; Part 1 - No 5; Part 2 - No 6;;

Interceptors; P. Butowski; No 1;

Aircraft on the Eve of the 21st Century; W. Zaleski; Nos 7-8;

Carrying Capacity of the Aircraft Fuselage: W. Sobieraj: Nos 7-8;

Flight Simulators; S. Tomaszewski and J. Kapica; No 12;

Helicopters; W. Sobieraj, G. Kowalczenko and A. Klonowski; No 2;

Strike Helicopter Mi-24; P. Butowski; Nos 7-8;

W-3 Helicopter; W. Michalski and A. Ochmanski; No 6;

Damage in Piston Engines of the Aircraft; M. Piglas and A. Adamovicz; Part 1-No 5; Part 2 - No 6;

Flight Conditions and Efficiency of a Piston Engine; R. Prociak, S. Szczecinski and H. Zambrzycki; Nos 7-8;

Military Flight Simulators; Z. Karolczyk; Part 1 - Nos 7-8; Part 2 - No 9;

Influence of Combustion Gases Temperature Before the Turbine on the Performance of Aircraft Turbine Engines; R. Wiatrek; No 11;

Modern Strike Aircraft; J. Grzegozewski; Nos 7-8;

History of Soviet Fighter Aircraft Development; G. Ciechanowski; No 4;

Integrated Aircraft Flight and Weaponry Controls; J. Grzegorzewski; No 3;

### Tanks and Motor Vehicles

US Armored Combat Vehicles: No 3:

Tachometric Fire Control Systems in Tanks; Z. Pankowski; Nos 7-8;

Tank T-72: Checking the Air Filter for Leaks: No 3:

Defect Identification in WTI-4 Air Filter; J. Godlewski, W. Kowalski and T. Dziubak; No 10;

Defect Identification in Crankshaft Bearing of the UTD-20 Engine; R. Dubiela; No 6:

Defect Identification and Service of Centrifugal Oil Filters; S. Kowalczyk; Nos 7-8;

Defect Identification in the Braking System; S. Pastumiak and K. Sitek; No 2; Supercharging of Piston Internal Combustion Engines; A. Pietak, R. Prociak, S. Szczecinski and A. Wysocki; No 6;

Selection and Change of Engine Oils; K. Baczewski and K. Biernat; No 11;

Operation of Tires; A. Szwed; No 6;

The Principle and Systems of Supercharging; A. Pietak, R. Prociak, S. Szczecinski and A. Wysocki; No 11;

The Quality of Mix in Gasoline-Powered Engines; P. Przychodzien and S. Szczecinski; No 2;

Quality of Fuels and Jubricants; 2. Bialka; No 2;

Single-Axle Trailer with a Louder; T. Rylski and S. Kaezmarezyk; No 11;

Metal Corroaion; A. Szymkow; No 10;

The Birth of a Tank; M. Krysa; No 3;

Reliability of Motor Vehicles; J. Janecki; No 10;

Car Service; Z. Kruk; No 1;

Audial Evaluation of Engine Condition; A. Stawarz and A. Szymkow; No 5;

Protecting Cars from Corrosion; A. Szymkow; No 11;

Diesel Fuel Under Low Temperatures; H. Lukasik; No 1;

Motor Oils; K. Baczewski and K. Biernat; No 9;

Alternative and Future Fuels for Motor Vehicles: J. Jakubowski: No 6:

Steam Propulsion in Cars?; No 4;

Issues in Development and Operation of Military Motor Vehicles; S. Kostrzewa and L. Prochowski; No 12;

Designs of Polish Medium Tanks; P. Zarzycki; Nos 7-8;

Road Trials of Ifantry Combat Vehicles; R. Jackowiak and R. Smokowski; No 4;

Storage of Refinery Products: Z. Bialka: No 1;

Preparation of PW-2 Car for Disembarkation; L. Turczynski; No 5;

Accelerated Grinding-in of Engines; A. Bryl; No 2;

Diesel Engine Starts; Z. Jarentowski; Nos 7-8;

Diesel Engine Starts Under Low Temperature; H. Kilar, S. Szczecinski and M. Uzdowski; No 2;

Development of Tank-carried Smoke Generators; M. Krysa; No 4;

Development of Tank Weaponry Stabilizers; T. Bichta, M. Jachol and A. Wyroba: No 5:

Truck Star 200W - 1986 Model; L. Turczynski; No 4;

Hydrogen-powered Engines; J. Jakubowski; No 10;

Engines Powered by Alternative Gaseous Fuels; J. Jakubowski; Nos 7-8;

Chinese Army Armor; No 3;

Repair of the Vehicle and Traffic Safety; Z. Niklas; No 4;

Aging of Motor Oils; K. Baczewski and K. Biernat; No 12;

Armored Personnel Carrier BTR-80; No 9;

Turbocharging--Opportunities and Constraints; A. Pietak, R. Prociak, S. Szczecinski and A. Wysocki; No 12;

Plastics in Cars; K. Grabczewski and K. Kaluza; No 4;

Tank Weaponry in the 1990s; Z. Pankowski; No 11;

Use of Batteries in Winter; Z. Jarentowski; No 1;

Ventilation in a Car Cabin; J. Szczecinski; No 5;

Properties of WTI-4 Air Filter in W-55 Engine; Nos 7-8;

Modern Wheeled Combat Vehicles; No 5;

Cast Iron in Car Design; J. Baranowski and K. Kaluza; No 4;

Protecting Batterties Against Overcharging; T.M. Landa and W. Szpak; No 2;

Motor Oil Substitutes; M. Debicki; No 1;

Substitutability of Motor Oils; M. Mroz; Nos 7-8;

Forty Years of the WOSS [Higher Officers Automotive School]; J.R. Muszynski; No 1;

#### Weaponry

Studies of Detonator Fuses; J. Knychala and B. Krysinski; No 11;

World War I Small Arms; A. Konstankiewicz; No 3;

Liquid Propelling Substances in Tube Weapons; J. Ewertowski, D. Maszek and L. Zgutka; No 6;

Czechoslovak CZ-75 Pistol; No 5;

Tachometric Systems of Fire Control in Tanks; 2. Pankowski; Nos 7-8;

Dischargers RWGL and AWGL; Z. Gwordz; No 6;

Forced Fragmentation Warheads; Z. Jopek and Z. Szymanski; No 12;

Single-cylinder Pneumatic Recuperator; M. Czeladzki, A. Cieplinski and R. Wozniak; No 10;

Kevlar--Armor Material; S. Kochanski; No 6;

Development of Laser Range Finders; No 10;

Light Mortars; Z. Pankowski; No 6;

Guided Aerial Bombs; J. Grzegorzewski; No 4;

The Impact Force of Pistol Ammunition; S. Kochanski; No 6;

New Pistol Ammunition; S. Kochanski; No 9;

New Anti-aircraft Missile and Artillery Systems; J. Gora and Z. Pankowski; Nos 7-8;

Military Knives; Z. Gwozdz; No 1;

The First Polish Rifle; P. Zarzycki; No 2;

Liquids for Hydropneumatic Recoil Mechanisms; A. Cieplinski, K. Fedyna and R. Wozniak; No 12;

Infrared Military Technology; J. Kilias; No 12;

Electronic Proximity Detonators; K. Zimonezyk and M. Rozplochowski; No 1;

Soviet "M" Type Missiles; W. Stech; No 1;

Development of Tube Artillery; K. Kowalewski; No 2;

Development of Tank Weaponry Stabilizers; T. Bichta, M. Jachol and A. Wyroba; No 5;

Detonator Fuses; J. Knychala and B. Krysinski; No 6;

Check-up of a Missile Detonator; M. Banczorowski and W. Kanka; No 6;

Tank Weaponry of the 1990s; Z. Pankowski; No 11;

Weaponry of Fighter Aircraft; J. Grzegorzewski; No 6;

Hungarian R78 Pistol; No 5;

Military Tube Weapons; A. Cieplinski, R. Wozniak and K. Fedyna; Part 1-No 12;

Searching for a New Pistol; S. Kochanski; No 5;

Modern Pistols and Revolvers; No 5;

Modern Sub-machine Guns; S. Kochanski; No 1;

Artillery Detonators; J. Knychala and P. Fonrobert; No 10:

One-hundred and Fifty Years of the Colt Revolver; Z. Gwozdz; No 4;

203 mm Howitzer B4-M; No 10;

#### Engineering Technology

Pushing Casing Pipes Without Digging Trenches; J. Boruta, M. Krawczyk and B. Kubacki; Nos 7-8;

Improvement of Engineering Equipment; T. Rylski, E. Kotopka and T.Gajde; No 10;

Single-axle Trailer with a Loader; T. Rylski and S. Kaczmarczyk; No 11;

Pile Driver KP-2; M. Korzeniewicz; No 2;

Cumulative Mine Charges; J. Garstka and M. Cyganik; No 6;

Oblong Charges of NATO Armies; J. Garstka; No 11;

Modernization of a Military Engineer's Kit; No 11;

Special Mines; J. Garstka and M. Rozin; No 3;

Patents Issued at the WITI [Military Institute of Engineering Technology]; S. Naczynski; No 4;

Chain Saw as the Basis of Small-scale Mechanization; T. Rylski and W. Kisielewicz: No 11:

Motorized Saws; T. Rylski and E. Kotopka; No 1;

Simulation of Scatter Mine Barriers; A. Kudowski; No 4;

Electronic Proximity Fuses; K. Zimonczyk and M. Rozplochowski; No 1;

Development of Single-bucket Excavators; S. Konopka; No 4;

Efficiency of Cumulative Charges: W. Jasinski and M. Cyganik: Nos 7-8;

Efficiency of Fragmentation Mines; J. Garstka; No 1;

Detonator Fuses; J. Knychala and B. Krysinski; No 6;
Bulldozer--Loader SL-35; A. Sokolowski; Nos 7-8;
Multi-scoop Trench Excavators; J. Sliwinski; No 5;
Detonators of Anti-tank Land Mines; J. Garstka and M. Cyganik; No 4;
System for Mining from the Mounted Minelaying Assembly; J.Garstka and M. Rozin; Nos 7-8;

### Chemistry

Detectors of Phosphorus--Organic Toxic Agents; A. Mierzwinski and Z. Witkiewicz; No 4;

Quality of Fuels and Lubricants; Z. Bialka; No 2;

Metal Corrosion; A. Szymkow; No 10;

Radioisotopic Methods in Aviation Technology; J. Lewitowicz; No 3;

Protection of Cars Against Corrosion; A. Szymkow; No 11;

Diesel Fuel Under Low Temperatures; H. Lukasik; No 1;

Motor Oils; K. Baczewski and K. Biernat; No 9;

Storage of Refinery Products; Z. Bialka; No 1;

Development of Tank-carried Smoke Generators; M. Krysa; No 4;

Aging of Motor Oils; K. Baczewski and K. Biernat; No 12;

Visibility and Detection in Smoke; C. Madej and Z. Hulewicz; No 11;

Detection of Chemical Contamination; A. Mierzwinski and Z. Witkiewicz; No 12;

Kits for Quality Control of Oils; M. Stankiewicz; No 1;

## Technical Progress

Microwave Acoustics in Electronic Surveillance; B. Kaminski; No 12; Automatic Processing of Meteorological Data; J. Kowalska; No 2; Studies of Radio Equipment Compatibility; W. Aloksa and W. Sznajzycht; No 10; Electrically Insulated Blocks; B. Bany; No 3; Liquid Propelling Substances in Tube Weapons; J. Ewertowski, D. Maszek and L. Zgutka: No 6; Digitation of Analog Radio Equipment; A. Kubacki; No 9; Cost-efficiency of Aircraft; J. Perlinski; Part 1-No 1; Part 2-No 2; Part 3-No Voice Communication Between Man and Machines; E. Wirkus; No 9; Inertial Navigation Systems; A. Gebura; Nos 7-8; Pile Driver KP-2; M. Korzeniewicz; No 2; Kevlar -- an Armor Material; S. Kochanski; No 6; Development of Laser Range Finders; No 10; Bringing Computers Closer to the Users; J. Konopka; No 1; Computer Graphics Simulation: J. Konopka: No 2: Sandwich Constructions; J. Godzimirski and M. Przybylski; No 1; Microwaves in Military Technology; B. Stec; No 12; Microcomputers -- Status and Prospects; U. Staniszewski; No 10; Reliability of Motor Vehicles; J. Janecki; No 10; New Materials in Arms Production; J. Bakalarski; No 5; New Anti-aircraft Missile and Artillery Systems; J. Gora and Z. Pankowski; Nos 7-8: New Audio-visual Equipment; U. Staniszewski: No 4;

Protection of Radio Communications by the Dispersed Spectrum Method; M. Suchanski; No 11;

Steam Propulsion for Cars?; No 4; Patents for the WITI; S. Naczynski; No 4; Infrared Military Technology; J. Kilias; No 12; Field Electricity Generators; J. Pieta; No 9; Progress of Cryptology; J. Pawelec; No 9; Surface Assembly of Electronic Sub-assemblies: R. Florynski and R. Ferus: No 9; Issues in Developing and Operating Military Vehicles: S. Kostrzewa and L. Prochowski; No 12; Designing Safe Helicopters; A.Olejnik and K. Sibilski; Nos 7-8; Accelerated Grinding-in of Engines; A. Bryl; No 2; Electronic Search Radars; W. Kanka and A. Halista; Nos 7-8; Space Reconnaisance; H. Drozdz and W. Kolosowski; Nos 7-8; Dispersing Satellite Television; W. Kolosowski and H. Drozdz; No 12; Development of Single-bucket Excavators; S. Konopka; No 4: Development of Integrated Circuits; J. Konopka; No 3; Star 200W Truck -- 1986 Model; L. Turczynski; No 4; Increased Maneuverability Aircraft; P. Zalewski; No 2; Aircraft on the Eve of the 21st Century; W. Zaleski; Nos 7-8; Satellite Navigation System; W. Derkacz; No 5; Supercharging Large and Medium Capacity Engines; L. Wandzilak; No 11; Hydrogen-powered Engines; J. Jakubowski; No 10; Carrying Capacity of an Aircraft Fuselage: W. Sobieraj: Nos 7-8: Bulldozer-loader SL-35; A. Sokolowski; Nos 7-8; Helicopters; W. Sobieraj, G. Kowaleczko and A. Klonowski; No 2; Optical Fibers in Field Communication Systems; P. Jachura and J. Skocinski; No 9; Computers in Tactical Reconnaisance; J. Januchowski; No 10; Plastics in Car Design; K. Grabczewski and A. Kaluza; No 4; Tank Weaponry in the 1990s; Z. Pankowski; No 11; Military Flight Simulators: Z. Karolczyk; Part 1 - Nos 7-8; Part 2 - No 9; Searching for a New Pistol; S. Kochanski; No 5: Modern Ultra-shortwave Receivers; M. Miller; No 9; Modern Attack Aircraft; J. Grzegorzewski; Nos 7-8; Automated Communication and Command Systems; Z. Klimek; No 5; Integrated Aircraft Flight and Weaponry Controls; J. Grzegorzewski; No 3; Cast Iron in Car Design; J. Baranowski and K. Kaluza; No 4;

### Technical Training

7-8;
Simulators of Radar Surveillance Situations; S. Janke and B. Jakubowski; No 12;
Computer Graphics Simulation; J. Konopka; No 2;
Promoting Creative Attitudes; S. Naczynski; Nos 7-8;
New Audiovisual Equipment; U. Staniszewski; No 4;
Designation of Radio Emissions; E. Golan; No 9;
Simulation of Scatter Mine Barriers; A. Kudowski; No 4;
Development of Technical Means of Propaganda in the Polish Armed Forces; U. Staniszewski; No 11;
Flight Simulators; S. Tomaszewski and J. Kapica; No 12;

Continuous Education of Engineering and Technical Personnel; J. Suchecki; Nos

Technology and Upbringing; A. Nowak; No 10; Military Flight Simulators; Z. Karolczyk; Part 1 - Nos 7-8; Part 2 - No 9;

Operation of Equipment

Study of Compatibility of Radio Equipment; W. Aloksa and W. Sznajzycht; No 10; Pushing Casing Pipes Without Digging Trenches; J. Boruta, M. Krawczyk and R. Kubacki; Nos 7-8;

Defect Identification in WTI-4 Air Filter; J. Godlewski, W. Kowalski and T. Dziubak; No 10;

Defect Identification in Crankshaft Bearings of UTD-20 engine; R. Dubiela; No 6;

Technical Defect Identification and Reliability of Machines; J. Lewitowicz; Nos 7-8;

Defect Identification and Service of Centrifugal Oil Filters; S. Kowalczyk; Nos 7-8;

Defect Identification in the Braking System; S. Pastusiak and K. Sitek; No 2; Selection and Substitution of Motor Oils; K. Baczewski and K. Biernat; No 11; Cost-efficient Utilization of MK-8TP Oil; L. Luczak; No 2;

Operation of Tires: A. Szwed: No 6:

Principles and Systems of Supercharging; A. Pietak, A. Prociak, S. Szczecinski and A. Wysocki; No 11;

Quality of the Blend in Gasoline-powered Engines; P. Przychodzien and S. Szczecinski; No 2;

Quality of Fuels and Lubricants; Z. Bialka; No 2;

Control of Thermoelectric Thermometers; F. Pawelek, Z. Kowalkowski and P. Koniorczyk; No 3;

Metal Corrosion; A. Szymkow; No 10;

Metrological Laboratory PLIT-AR: No 9:

Charging Silver-zinc Batteries; L. Gluski; No 3;

Aircraft Painting; J. Turek and V. Pochylski; No 4;

Radioisotopic Methods in Aviation Technology; J. Lewitowicz; No 3;

Repairs of Sandwich Constructions; J. Godzimirski; No 2;

Thermal Spraying; J. Baczmaga; Nos 7-8;

Science on the Control of Operations; Z. Cygan; No 10;

Reliability of Technical Units; G. Kowalczyk; No 2;

Automobile Service; Z. Kruk; No 1;

Load on the Generator Bearing; Z. Zaradny; No 2;

Audial Evaluation of the Engine Condition; A. Stawarz and A. Szymkow; No 5;

Anti-corrosion Protection of Cars; A. Szymkow; No 11;

Dust Filter for Turbine Engines; S. Szczecinski and R. Wiatrek; No 3;

Diesel Fuel Under Low Temperatures; H. Lukasik; No 1;

Motorized Saw as a Basis for Small-scale Mechanization; T. Rylski and W.Kisielewicz; No 11;

Liquids for Hydropneumatic Recoil Mechanisms; A. Cieplinski, K. Fedyna and R. Wozniak; No 12;

Issues of Communications Safety; J. Hajdak; No 9;

Problems of Development and Operation of Military Vehicles; S. Kostrzewa and L. Prochowski; No 12;

Designing Safe Helicopters; A. Olejnik and K. Sibilski; Nos 7-8;

Road Trials of Infantry Combat Vehicle; R. Jackowiak and R. Smokowski; No 4; Storage of Refinery Products; Z. Bialka; No 1;

Preparation of PW-2 Truck for Disembarkation; L. Turczynski; No 5; Accelerated Grinding-in of Engines; A. Bryl; No 2;

Diesel Engine Starts; Z. Jarentowski; Nos 7-8;

Diesel Engine Starts Under Low Temperature; H. Kilar, S. Szczecinski and M. Uzdowski; No 2;

Engines Powered by Alternative Liquid Fuels; J. Jakubowski; No 9; Engines Powered by Alternative Gaseous Fuels; J. Jakubowski; Nos 7-8; Efficiency of Cumulative Charges; W. Jasinski and M. Cyganik; Nos 7-8; Check-up of a Missile Detonator; M. Banczorowski and W. Kanka; No 6; Stands for Studying Dust Filters; P. Dzierzanowski and Z. Miller; No 11;

Repair of a Vehicle and Traffic Safety; Z. Niklas; No 4;

Aging of Motor Oils; K. Baczewski and K. Biernat; No 12;

Turbocharging--Opportunities and Constraints; A. Pietak, R. Prociak, S. Szczecinski and A. Wysocki; No 12;

Equipment for Putting in Cable Lines; E. Okon and A. Sadomski; No 1;

Damage to Piston Engines of Aircraft; M. Piglas and A. Adamowicz; Part 1-No 5, Part 2 - No 6;

Use of Batteries in Winter; Z. Jarentowski; No 1;

Noise Control at an Airfield; K. Janusiak and S. Szczecinski; No 6;

Flight Conditions and Efficiency of Piston Engines; R. Prociak, S. Szczecinski and H. Zambrzycki; Nos 7-8;

Ventilation in a Car Cabin; J. Szczecinski; No 5;

Properties of WTI-4 Air Filter in W-55 Engine; Nos 7-8;

Influence of Exhaust Gases Temperature Before the Turbine on the Performance of Aircraft Turbine Engines; R. Wiatrek; No 11;

Protecting Batteries Against Overcharging; T. M. Landa and W. Szpak; No 2;

Substitutes for Motor Oils; M. Debicki; No 1;

Substitutability of Motor Oils; W. Mroz; Nos 7-8;

Impurities in Turbine Ship Engines; A. Charchalis and K. Wroblewski; No 2;

Kits for Quality Control of Oils; M. Stankiewicz; No 1;

### Inventions and Innovations

Tank T-72: Checking the Air Filters for Leaks; No 3;

Cost-effective Utilization of MK-8P Motor Oil; L. Luczak; No 2;

Electronic Rural Telephone Exchange ECW-64B; T. Topolewski, W. Radzikowski and M. Pawlaczyk; No 12;

"Golem" - a Device for Horizontal Pushing of Pipes in the Ground; J. Boruta, M. Krawczyk and B. Kubacki; No 10;

Single-axle Trailer With a Loader; T. Rylski and S. Kaczmarczyk; No 11;

Pile Driver KP-2; M. Korzeniewicz; No 2;

Promoting Creative Attitudes; S. Naczynski; Nos 7-8;

Charging Silver-zinc Batteries; L. Gluski; o 3;

Modernization of a Military Engineer's Kit; No 11;

Interface for ZX Spectrum Microcomputer and DZM-180 Printer; K. Mizeracki, K. Fedyna and A. Cieplinski; No 10;

The Best in the Silesian Military District; S. Naczynski; No 5;

Patents for the WAT: Z. Ognik: No 12:

Patents for the WITI; S. Naczynski; No 4;

Improvement Projects in the Silesian Military District; S. Naczynski; No 6; Inventions and Innovations in the WIL; A. Korzeniewska and T. Nowicki; No 9;

Inventors and Innovators of the Warsaw Military District; S. Naczynski; No 1;

Inventions in Light of the Regulations in Effect; J. Szymczyk; No 3; Radio Station Generator; A. Lomnicki and W. Badowski; No 1;

### Technical Briefs

Brazilian Submachine Gun; No 3; Infantry Combat Vehicle "Sosima"; No 6; Light Tank "Stingray"; No 1; Electrokinetic Pressure Sensors: No 1: Greek 81 mm Mortar; No 5; HOT 2: No 3: Israeli Howitzer-Gun M-72; No 5; Israeli Infrared Vision Devices; No 6; Israeli Automatic Pistol: No 2: Assault Rifle "90"; No 1; Sniper Rifle M36; No 9; Light Tank Turret; No 3; M1-26; No 2; Modernization of M1 tank: No 3: Modernization of SG-77 Carbine; No 9; Modernization of "Kurassier" Anti-tank Gun; No 6; Self-propelled "Leguan" Bridge; No 5; A New Concept of Cartridge: No 6: New Chassis for 35 mm Anti-aircraft Guns; No 1; New "Panhard" and "Renault" Vehicles: No 2; Armor-piercing APFSDS Missile: No 2: "Pandur" Armored Vehicle: No 6: "Renault VBL" Armored Vehicle: No 1; Air-to-surface Guided Missile HELI-TOW; No 3; Air-to-surface Guided Missile RBS-S6 "Bill"; No 1; Third Generation Air-to-surface Guided Missiles; No 6; Soviet Second Generation Air-to-surface Guided Missile; No 9; Hand-held Grenade Launcher: No 3: Mobile Battery Unit SRZ-A-M1; No 1; Self-propelled KS-5473 and KS-6471 Cranes; No 3; Acoustic Station SAR-2; No 1; Chemical Detector GSA-12: No 5: Active Defense Means of a Tank; No 9; Thermal Insulation Sleeve of a Rifle Barrel; No 5; Tornado ECR; No 3; Tempest Systems; No 9; Hungarian Armored Carrier PSZH; No 5; Multi-function Machine Gun: No 5: Turret for TA-25 Anti-aircraft System: No 5: XT-4; No 6; Modernized "Pinzgauer" Trucks; No 9; ZU-23: No 9: Self-propelled 25 mm MADIS Artillery System; No 2; Self-propelled 76 mm OTO 76/62 Artillery System; No 2; Self-propelled 120 mm Mortar; No 9;

## Foreign Armies

US Armored Combat Vehicles: No 3: Light Mortars; Z. Pankowski; No 6; Guided Aerial Bombs; J. Grzegorzewski; No 4; Oblong Charges of NATO Armies; J. Garstka; No 11; Satellite Communications; T. Petkowicz; Nos 4 and 11; Small Pilotless Drones; E. Sobecki; Nos 7-8; Special Mines; J. Garstka and M. Rozin; No 3; New Pistol Ammunition; S. Kochanski; No 9; New Missile and Artillery Arti-aircraft Systems; J. Gora and Z. Pankowski; Nos Chinese Army Armor: No 3: Fighter Aircraft Weaponry; J. Grzegorzewski; No 6; Searching for a New Pistol; S. Kochanski; No 5; Modern Wheeled Combat Vehicles: No 5: Modern Submachine Guns; S. Kochanski; No 1; Modern Ship Radars; M. Kukulka; No 1; Detonators of Anti-tank Land Mines; J. Garstka and M. Cyganik; No 4;

## Miscellaneous

Automatic Processing of Meteorological Data; J. Kowalska; No 2; Defect Identification and Reliability of Machines; J. Lewitowicz; Nos 7-8; Continuous Education of Engineering and Technical Personnel; J. Suchecki; Nos 7-8: Annual Prizes for Authors; Cover of No 1; Voice Communication Between Man and Machines; E. Wirkus; No 9; "Goles" - a Device for Horizontal Pushing of Pipes in the Ground; J. Boruta, M. Krawczyk and B. Kubacki; No 10; Rational, Intelligent and Economical Management; T. Kusmierski; No 4; Promoting Creative Attitudes; S. Naczynski; Nos 7-8; Modernization of Technical Means of Propaganda; U. Staniszewski; No 3; Thermal Spraying; J. Baczmaga; Nos 7-8; Science on the Management of Operation Processes; Z. Cygan; No 10; Reliability of Technical Units: G. Kowalczyk; No 2; Standardization Equals Progress Plus Economies; M. Turek; No 9; New Books: No 5: Load on the Generator Bearing; Z. Zaradny; No 2; On the Development of Military Technology; K. Kolomanski; Part 1 - Nos 7-8, Part 2 - No 9, Part 3 - No 10; Motorized Saws; T. Rylski and E. Kotopka; No 1; Progress of Cryptology: J. Pawelec: No 9: Satellite Reconnaisance; W. Derkacz; No 3; Development of Technical Means of Propaganda in the Polish Armed Forces; U. Staniszewski; No 11; Satellite Navigation System: W. Derkacz; No 5; Stand for Dust Filter Studies; P. Dzierzonowski and Z. Hiller; No 11; Technology and Upbringing: A. Novak: No 10: Visibility and Sighting in Smoke; C. Madej and Z. Hulewicz; No 11; Multi-scoop Trench Excavatgors; J. Sliwinski; No 5; Impurities in Ship Turbine Engines; A. Charchalis and K. Wroblewski; No 2;

Systems for Mining from the Mounted Minelaying Assembly; J. Garstka and M. Rozin; Nos 7-8;

Systems for Quality Control of Oils; M. Stankiewicz; No 1;

Thirty-five Years of the Military Technical Academy; E. Wlodarczyk; No 12;

Forty Years of the Higher Officers Automotive School; J.R. Muszynski; No 1;

Forty-first International Technical Fair in Ploydiv; T. Szafarz; No 2;

#### Information Notes

## Artillery and Small Arms

Self-propelled L50 Gun: No 3: Laser Sight LAS 111; Nos 7-8; Self-propelled M109 Howitzer; No 10; Automatic Rifle G8; No 1; Automatic Rifle SIG SG550; No 2; Assault Rifle SG540; No 1; Naval Anti-aircraft Gun GAM-B01; No 2; Automatic Pistol "Glock"; No 1; Automatic Pistol 82; No 3; Hand Machine Gun UK Modification 59; Nos 7-8; Self-propelled Artillery Missile Launcher "Teruel-3"; No 11; Audiometric Station; Nos 7-8; Radar Station EMVA Mk 10B; No 6; Machine Gun SS-77, 7.62 mm; No 5; Pistol 92SB-F; 9 mm; No 10; Semi-automatic 40 mm Grenade Launcher; No 5; Self-propelled Anti-aircraft System M-988 "Sergeant York," 40 mm; No 3;

# Communications Equipment

The AP-82 Telephone; No 9; Portable Radio Station PRC 538; No 10; Portable Ultra Shortwave Radio Station PRC 549; No 11; Radio Station RT 100/MP; No 9; Modernized PRC 77 Radio Station; No 10;

#### Engineering, Tanks and Motor Vehicles

Infantry Combat Vehicle; No 6;
Tank "Merkava" Mk 2; No 4;
Tank T-72; No 3;
Light Military Passenger Car VW 181; Nos 7-8;
Blade Track Hinesweeper EMP; No 9;
Armored Reconnaisance Vehicle M11; No 11;
Self-propelled Crane KS-7471; No 4;
Self-propelled Crane KS-8471; No 4;
Cross-country General Purpose Car "Hummer"; No 1;

# Chemical Equipment

Special Actions Device ARS 120; No 2; Special Actions Device ARS 14; No 2;

Aircraft and Helicopters

Light Communication and Transport Aircraft Pilatus P-6A Turbo Porter; No 5; Tactical Fighter J35F "Draken"; No 11; Instruction and Training Aircraft Pilatus PC-7 "Turbo Trainer"; No 5; Attack Aircraft AM-X; No 9; Attack Aircraft AV-8B; No 6; Attack Aircraft Fairchild A-10A Thunderbolt II; No 4; Combat Helicopter Mi-24; No 6.

#### Navai Journal

Gdynia PRZEGLAD MORSKI in Polish No 12, Dec 86 pp 82-91

[Excerpts] Operational Art and Tactics of Naval Forces

Opinions on the Development of Mine Countermeasures from the Standpoint of Developing Mine Weapons; Capt B.A. Engr Wladyslaw Grzadkowski; No 4;

Mine Detection Along the Route of a [Battleship] Group; J.G.; No 4;

Contemporary Problems of Balancing Naval Forces of the State; Cmdr Dr Henryk Solkiewicz; No 5;

Tactical Aspects of Employing Seaborne and Airborne Naval Forces in Antisubmarine Warfare (in the Opinion of Western Experts); Capt B.A. Engr Wladyslaw Grzadkowski; No 5;

The Role of Tube Naval Artillery in Combat at Sea; Naval Lt B.A. Engr Lech Marczuk; No 5;

Mine Countermeasures -- Which Way?; W.G.; No 6;

Mine Detection--or Is it Reconnaisance Search for Mines?; Lt Cmdr Jerzy Gembicki; No 6;

The Role, Objectives and Opportunities for Using Mines in Combat at Sea; Capt B.A. Engr Wladyslaw Grzadkowski: Nos 7-8;

Maneuvering in Formation: Naval Lt B.A. Engr Pawel Opala: Nos 7-8;

Significance of the History of Naval Hilitary Art for the Development of Contemporary Hilitary Thought; Cmdr Dr Czeslaw Pertkiewicz; No 9;

Preparation for "Anti-submarine Warfare"; W.G.; No 9;

The Role of Straits in Sea Combat; Capt B.A. Engr Wladyslaw Grzadkowski; No 12;

## Training and Indoctrination

A New School Year in the Navy; Capt Mieczyslaw Serafin; No 1;

Methods of Visual Search in Search and Rescue Hissions at Sea; Lt Cmdr Jan Puscian; No 1;

Psychological Aspects of Difficulties in Indoctrination; Cmdr Dr Wlodzimierz Korczynski; No 2;

Labor as an Expression of Human Dignity; Capt Prof Dr Henryk Adamczyk; No 3;

Motives for Selecting the College and Professional Expectations of WAM [Military Medical Academy] Officer Cadets (Attitude Towards Future Service in the Navy); Lt Col Dr Czeslaw Wisniewski; No 3;

Interpersonal Relations in the Higher Naval School in the Opinion of Cadets;

Capt Prof Dr Henryk Adamczyk; No 5;

Cooperation of Naval Unit Commanders With the Trade Union Chapters of the [Civilian] Employees of the Armed Forces; Capt B.A. Waldemar Raczkowski; No 6;

Molding the Attitudes of Seamen; Lt Cmdr Dr Wlodzimierz Korczynski; No 6;

Astronomical Position of a Vessel in the Early 19th Century; Prof Dr Capt Adam Wolski; No 6;

Fundamental Principles of Creative and Efficient Actions by the Commander; Capt Prof Dr Henryk Adamczyk; Nos 7-8;

Issues of Responsibility and Requirements by Superiors; Capt B.A. Stefan Pawlus (Ret); Nos 7-8;

A Foretaste of Independent Command; Cmdr Janusz Joachimczak (Ret); Nos 7-8; Historic Awareness and Marxist Worldview in the Process of Instruction and Indoctrination; Cmdr Krzysztof Zabieglinski; Nos 7-8;

A Mine Sweeper Group in the Past and at Present; Capt Kazimierz Wolan; No 9;

Moral, Political and Psychological Preparation of the Officer Corps and Seamen for Action on the Modern Battlefield; Capt Prof Dr Henryk Adamezyk; No. 10;

Methods of Training Radio Operators; Cmdr Henryk Plaskaty; No 10;

Thirty-five Years of Instruction in Military Science at the WSM (Higher Marine School) in Gdynia; Capt B.A. Wieslaw Grabowski; No 11;

Involvement and Responsibility of Career Officers in Light of Socialist Morality; Capt Prof Dr Henryk Adamczyk; No 12;

Pedagogical Qualifications of Career Officers; Cmdr B.A. Engr Wildemar Gryglaszewski; No 12;

Improving Basic Elements of the System of Training at the Electrical Engineering Course of the CSSMW [Navy Specialists Training Center]; Cade B.A. Engr Stanislaw Laniecki; No 12;

Commanding, Management and Organization of Work

Benefits of Using Computers to Evaluate the Navigational-Hydrographie,
Hydrometeorological and Ice Conditions; Cmdr B.A. Engr Jan Jarzyna; No 1;
A Battleship in the System of Notions of Marine Technology; Capt B.A. Engr

Narcyz Klatka; Nos 7-8;

Circulation of Information Aboard a Submersible Vehicle; Naval Lt Marek Krotowicz; Nos 7-8;

"Day of the Distinguished" in the Unit (Principles of Organization); Capt Engr Stefan Swierczewski; No 12;

Naval Vocabulary in the "Small Marine Dictionary"; Capt B.A. Engr Narcyz Klatka; No 12;

Materiel and Weapons

Issues of Wear and Restoration of Seaworthiness of Vessels; Naval Second Lt. B.A. Andrzej Falkowski; No 1;

Deployment of Mine Hunters in Combat; Cmdr Dr Engr Marek Mienaltowski; No 2;

Mechanical Changes in the Glass Fiber-reinforced Plastic After Shock Stress; Capt B.A. Engr Narcyz Klatka and Prof Dr Engr Zbigniew Zaczek; No 2;

High-speed Diesel Engines as the Main Power Plants of Corvettes and Frigates; Adam Smiglelski; No 2;

Classification of Vessel Repairs; Naval Lt B.A. Andrzej Falkowski; No 4;

Parametric Transformers in Hydroacoustics; Engr B.A. Grazyna Grelowska; No 4;

Selected Optimization Issues in Selecting Materials for Plating a Mine Countermeasures Vessel; Capt B.A. Engr Narcyz Klatka; No 5;

Analysis of Losses of Ships in 1981 Through 1984 Due to Missile Hits and Mines; Capt B.A. Engr Narcyz Klatka; No 6;

Influence of the Age of Vessels on the Scope and Duration of Repairs (Parts 1 and 2); Nasval Lt B.A. Andrzej Falkowski; Nos 6 and 7-8;

Preliminary Premises and Constraints on Submersible Vehicle Layout; Naval Lt. Marek Krotowicz; No 6;

Quentions on the Fase of Ship Servicing; Cmdr Dr Engr Leszek Piaseczny; Nos 7-8;

Selected Issues in Shock Protection Against Low-flying Missiles in Light of Combat Experience; N.K.; Nos 7-8;

Equipment and Arms of Combat Divers of NATO Countries; Naval Lt Krzysztof Mazur; Nos 7-8;

Searching for an Antitorpedo; Cmdr Dr Engr Antoni Komorowski; No 9;

Description of the Methods of Reducing the Range of Radar Detection and Use of Composite Signals (LMCz) to Improve the Technical and Tactical Ferfermance of Radars; Second Lt B.A. Engr Jan Skowronski; No 11;

Obtaining Samples from the Wreck of SS. "Busko Zdroj" in Light of the Use of Explosives; Capt B.A. Engr Narezyz Klatka; No 12;

# Operations Support

The Raitic Sea--Hydrological Characteristics (Parts 1, 2 and 3); Michal Lacki; Nos 1, 2 and 3;

Beview of the Navigation Methods Currently in Use; Naval Lt Dr Engr Tadeusz Kantak; No 2;

Work of Shortwave Radio Stations with an Abrupt Change in Carrier Frequency; Jan Nadolski; No 2;

Navigation as a Process; Lt Cmdr Dr Engr Andrzej Felski; Second Navy Lt. R.A. Engr Marek Krotowicz; No 3;

Fvaluation of the Effect of a New Pharmaceutical Preparation (Scopoderm TTS)
Against Sen Sickness; Maj M.D. Grzegorz Bosinski and Lt Col M.D. Tomasz
Debrucki; No 3;

The Bole of Condiments in the Nutrition of Vessel Crews; Navy Lt B.A. Marian Mornwaki and Senior Sesman B.A. Dariusz Waldoch; No 3;

International Convention on Marine Search and Rescue on the Offensive; Lt Cmdr Engr Maciej Drogosiewicz; No 4;

Behavior of a Castaway Upon Leaving the Vessel; Lt Cmdr Engr Maciej Drogoslewicz and Lt Cmdr M.D. Konstanty Krawlee; No 5;

Modern Views on Medical Segregation; Lt Cmdr M.D. Stanislaw Bural; No 9-

Maintenance of Individual Contamination Protection Means in a Stat
Technical Rendiness (Parts 1 and 2); Lt Cmdr Engr Januar Pawlice.
and 11;

# Legal Issues

Protection of Economic Interests of the PRP in the Baltic Sea; Cmdr B.A. Engr Pawel Gussmann and Naval Second Lt B.A. Jerzy Daca; No 1;

Criminal Penalties for the Perpetrators of Pilferage of Social Assets, Mismanagement and Waste; Naval Lt B.A. Wojciech Walczak; No 3;

Means and Methods of Sea Combat and the International Law; Dr Marian Flemming; No 6;

On the Need to Verify the Notion "Rescue at Sea" in the Polish Maritime Law; Lt Cmdr Jan Puscian; Nos 7-8;

### From Naval Practice

Mins Sweepers in the Falklands Conflict; Naval Lt B.A. Engr Pawel Opala; No 9;

# Foreign Naval Forces

The Tasks of Mine Hunting Vessels (Part 1); Cmdr Dr Engr Marek Nienaltowski; No 1:

Thirty Years of the [West German] Federal Navy; Capt Dr Zbigniev Cieckowski; No 1;

News About Foreign Navies; Adam Smigielski; Nos 1 through 12;

Selected Notions in US Military Doctrine; Capt Mieczyslaw Serafin; No 6;

The Japanese Naval Defense Force; Adam Smigielski; Nos 7-8;

Helsinki-Class Missile Boats (Finland); Engr B.A. Andrzej M. Jaskula; Nos 7-8; A Review of Nuclear Submarines; Cmdr Dr Engr Jozef Farmas and Junior Warrant Officer Krzysztof Kicerman; Nos 7-8;

American Concepts of Using Surface Ships in Combat at Sea; Capt Walerian Hurka; No 9;

Destroyer of the 21st Century; M.S.; No 9;

Mine Blockade in the Plans of NATO Naval Forces; Capt B.A. Wladyslaw Grzadkowski; No 10;

Naval Forces of the FRG: J.G.: No 10:

Royal Norwegian Navy from 1945 Through 1986; Naval Lt B.A. Engr Wieslaw Topolski; No 10;

Development of US Sea-based Ballistic Missiles; Jan Radziemski B.A.; No 10; Naval Forces of Denmark; J.G.; No 11;

#### From Life in the Navy

Twenty Years of Reliable Watch of the "Condor"; Cmdr Janusz Joachimczak (Ret); No 3;

Tenth Anniversary of the Death of Vice Admiral Zdzislaw Studzinski; Zbigniew Wojciechowski; No 3;

Changes in the Navy Command of the PRP; M.S.; No 4;

On the Eve of the 10th PZPR Congress; No 4;

Third Age; K.G.; No 4;

Captain B.A. Engr Medard Przylipiak (1931-1986); I.K.; No 4;

Meeting of the Submariners' Community on the Occasion of the Fortieth Anniversary of Seagoing Submarines; Cmdr Januar Joachimezak (Ret); No 5; Captain M.D. Bronislaw Gunia (1923-1986); M.D.; No 5;

Captain Dr Edward Laczny (Ret) (1924-1986); J.G.; No 6; After the 10th PZPR Congress; Capt Waldemar Raczkowski; No 11.

## Air Force Journal

Warsaw PRZEGLAD WOJSK LOTNICZYCH I WOJSK CBRONY POWIETRZNEJ KRAJU in Polish No 12, Dec 86 pp 81-88

[Excerpts] I. Papers

Leading and Occasional Articles

Pre-congress Balance Sheet of the Fliers; Col M. Gasperovicz; No 6; The Instruction and Indoctrination Functions of a Squadron Commander; Lt Col B.A. H. Holosyniuk; No 10;

Worthy of Recognition and Emulation; D. Kazmierska, No 3;

Holding Ideological and Horal Attitudes of Young Career Officers; Gen Bde Prof Dr H. Wlodarski; Nos 7-8;

Thirty-five Years of WIRAZE; No 4;

#### Tactics

Transport Aviation in Combat Actions; Capt Pilot Engr J. Czyzewski; No 2; Joint Action of Fighter Planes in Combined Aerial Warfare; Col Pilot Er J. Jagielski; No 1;

On the Methodsfor Ensuring Surprise in Air Operations; Lt Col Dr Engr J. Jagielski; No 1;

Optimization of the Use of Air Forces; Lt Col Dr Engr J. Jagielski; No 6;

Fighter Aircraft in Combat Against Helicopters; Maj Pilot M. Kaczmarski; No 1; Simultaneous Strikes by Fighter-bomber Aircraft; Haj Pilot B.A. Engr J. Karpowicz; No 5;

Helicopter in Combat Against a Tank; Lt Col Pilot A. Kolankiewicz and Lt Col Engr S. Pulyk; No 4;

Organization of Combat at a Tactical Fire Subunit of Missile Forces of Air Defense; Lt Col Dr Engr M. Kopczewski; Nos 7-8;

The Role of Maneuver in the Tactics of Air Combat; Col N. Kudinov; No 9;

Air Combat of Fighter-Bomber Aircraft; Lt Col Pilot A. Mieszawkin; No 10; Thoughts on Air Combat in the Theater of Military Operations; Col Pilot B. Palen; No 2;

Ground Defense of an Airfield; Maj Engr A. Stasiak; No 11;

Strikes on Ground Targets by Attack Helicopters; Capt Navigator Engr A. Swiatczak; No 12;

Conclusions from Engagements Between Tanks and Attack Helicopters; Col Prof Dr J. Szyszkowski (Res); No 2;

Tactics and Results of Electronic Warfare by Air Forces in Light of Military Conflicts; Lt Col B.A. Engr M. Tolkacz; No 5;

Local Wars, Incidents in the Air and Air Tactics; Capt Pilot engr E. Tomisia; No 4:

Radar Reconnaisance in Mountainous Areas; Lt Col Engr J. Wieczorek and Maj B.A. Engr J. Kozlowski; No 2; Simultaneous Decision-making in the Squadron; Capt Pilot J. Adamezyk; No 11; Mathematical Methods in Planning the Actions of Air Defense Forces; Col Dr Engr S. Antezak; No 12;

Negotiation of a Contaminated Area by a Small Unit; Maj J. Archaeki; No 1; Evaluation Systems in Troops Training; Lt Col Dr Engr M. Blim; No 12;

Work Until You Succeed (Interview with Lt Col T. Krzyzowski; by Lt Col B.A. Engr R. Dziubel; No 5;

Tactical Thinking of a Pilot; Lt Col Pilot Dr B. Galoch; No 1;

Expectation or Anticipation by the Pilot; Lt Col Pilot Dr B. Galoch; No 6;

Flying a Helicopter in the Mountains; Col Pilot J. Gomolka; No 2;

How Does One Fly Over the "Roof" of Africa?; Col Pilot J. Gomolka; No 4;

How to Teach WOSL [Higher Air Force Officers School] Cadets Air Tactics?; Col Pilot Dr J. Gotowala, Col Pilot L. Szutowski, Col Pilot Z. Jankowski and Col Pilot H. Urbaniak; Nos 7-8;

A Systemic View of Military Reconnaissance; Lt Col Z. Groszek; No 6;

Method of Parallel Combat Training; Col Pilot R. Harmoza and Col Pilot R. Zakrzewski; No 10;

Choice of a Rational Decision in Strike Aviation; Col Pilot Dr L. Jablonski; No 4;

Personal Computer, Anybody?; Capt B.A. Engr K. Jesionowski; No 4;

"Spectrum" Paves the Way; Capt B.A. Engr K. Jesionowski; No 6;

Utility Programs; Capt B.A. Engr K. Jesionowski; Nos 7-8;

Use of Resources in Battlefield Simulation; Lt Col Engr R. Kacala; No 3;

Labyrinths of Cooperation; Col Pilot A. Kolankiewicz and Lt Col Engr S. Pulyk; No 12;

Chemical Training of the WOSL Cadets; Maj B.A. Engr M. Konieczek; No 9;

Pros and Cons of Automation; Lt B.A. Engr M. Koselski and Second Lt B.A. Engr W. Nawrotek; No 11;

Development of Automated Systems of Information Processing in the Radioelectronic Troops of Air Defense; Lt Col H. Kot; No 4;

Results of a Survey on Methods of Flight Preparation; Lt Col Pilot A. Krason; No 12;

Computer Technology in the Operations of Commands and Staffs; Capt B.A. Engr K. Krauze; No 1;

Training of Service Personnel for Television and Optimization Devices of a Small Unit of the Missile Forces of the Air Defense; Maj Engr A. Kubiak; No 11;

The Use of Forces and Means of Air Defense to Sight Air Targets; Maj M. Kurlowicz; No 3;

Current Control of Student Training; Lt Col Dr Engr E. Kwolek and Lt Col B.A. Engr J. Czeczotka; Nos 7-8;

Classification of Aerial Reconnaissance Objects; Col Navigator Dr J. Legut; No 4;

Evaluation of Efficiency of Aerial Reconnaissance; Col Navigator Dr J. Legut; Nos 7-8;

Microcomputers in an Air Force Unit; Capt Pilot Engr P. Lagosz and Lt Engr D. Jakubowski; No 12;

How to Teach WOSL Cadets Air Tactics; Col Prof Dr J. Machura and Certified Col Pilot r. Harmoza; No 9;

Post-graduate Training of Physicians in the Air Defense Troops; Lt Col M.D. H. Medykowski; No 5;

Use of Helicopters in a Mine Attack; Capt Navigator Engr W. Mirek; No 2;

Independent Negotation of Scatter Minefields; Maj B.A. Engr M. Nikolajuk and Maj B.A. Engr R. Dabrowski; No 1;

Visual Reconnaissance at Low Altitude; Lt Col Dr Engr J. Nowacki and Lt Col Dr Engr R. Olszewski; No 3;

Using Models in Tactics Instruction; Lt Col Pilot M. Ozyra and Lt Col Engr S. Pulyk; No 9;

Microcomputers in Improving the Process of Training of Specialists; Col Dr Engr N. Paszak and Lt Col B.A. Engr Z. Radom; No 5;

Tactical Training of Cadets at the COSST [National Center for the Training of Air Force Technical Specialists]; Col Dr Cz. Piekart; No 2;

Methods of Work by a Combined Arms Commander in Preparing a Battle and an Operation; Col Dr A. Prokop; No 10;

Teaching of Tactics in the Course of Instruction; Capt Pilot Engr B.A. K. Rusocki; No 3;

Reconnaissance of a Field Airstrip in Combat; Capt A. Staszak; No 3;

Evaluating the Efficiency of Work of Automated Air Defense Command Posts; Lt B.A. Engr Z. Swiatnicki; Nos 7-8;

Tactical and Special Exercises of a Flight Support Company; Capt Engr W. Torchala; No 1;

Forming the Habit of Protecting Against Electronic Reconnaissance and Interference; Lt Col J. Wasiak; No 2;

Use of Automated Command Posts in Guiding Anti-aircraft Missile Fire; Maj Engr S. Wieczorek; No 2;

Meteorological Report--An Attempt at Modification; Lt B.A. J. Wiktorowski; No 6;

Laboratory Classes in Technical Education; Lt Col B.A. Engr J. Wysopal; Nos 7-8;

The Role of Microcomputers in the Work of Staff Officers; Col R. Zakrzewski and Lt Col B. Skrzyniarz; No 9;

## Flight and Work Safety

Icing--Still a Danger; Capt Dr Engr A. Adamowicz; No 11;

SARPP-12DM Will Tell You the Truth; Col B.A. Engr J. Belcik; No 4;

Issues of the Air Support and Rescue Service; Lt Col Pilot B.A. W. Bolotowicz; Nos 7-8;

Alcohol - A Needless Risk; Cmdr Second Lt Navigator K. Boraw: .. i (Res); No 2;

Lim Braking on a Landing Run; Maj Pilot S. Gacek; No 4;

Thank you...; Col Pilot R. Grundman; No 1;

Approaches; Col Pilot R. Grundman; No 2;

Accident; Col Pilot R. Grundman; No 3;

Love Letters; Col Pilot R. Grundman; No 6;

Flights in Free Space; Col Pilot R. Grundman; No 10;

Adventure with a UFO; Col Pilot R. Grundman; No 11;

Safety of Flight with Weapons; Col Dr Engr W. Kaczmarski; No 12;

Spontaneous Helicopter "Drag" When Exiting a Dive; Lt Col Pilot A. Kolankiewicz and Lt Col Engr S. Pulyk; No 6;

Influence of the Lubricant on the Safe Operation of Oxygen Dispensers AZKS-75; Prof Dr Engr W. Kutkiewicz and Engr B.A. S. Michalak; Nos 7-8; The Trend of Development in Ejection Seats; Lt Col Engr J. Lipinski and Maj B.A. Engr W. Pokorski; No 10;

Rolling Off the Runway; signed "Flier"; No 10;

How to Save an Aircraft; signed "Flier"; No 11;

Haste and Routine; signed "Flier"; No 12;

Influence of Morale on the Safety of Flight Training; Col Pilot Dr Z. Matysiak; Nos 7-8;

Normal Overload Charge; Maj Pilot J. Obala; No 3;

Bird Strikes; Col Pilot R. Rychlowski and Lt Col Engr S. Pulyk; No 3;

A Surprising Phenomenon; Maj Pilot B. Sasim; No 5;

Flight Training and Flight Safety; Maj Pilot B. Sasim; No 9;

Flight Safety in US Aviation in 1985; Col K. Stec; No 10;

Once More About Stalls; Lt Col Pilot J. Szczygiel; No 9;

Pilot's Habits and Fatigue and Flight Safety; Lt B.A. Engr S. Wozniak; No 5;

# Operations Support

Icing of the Aircraft; Capt Dr Engr A. Adamowicz; No 10;

Atmospheric Conditions in Selected Flight and Climatic Regions; Capt B.A. Engr M. Boski; No 12;

Aerial Rescue; Lt Col E. Burzymowski; No 10;

Wind Shears, Their Causes and Consequences; Lt B.A. Engr J. Dudziak; No 3;

A Difficult Time for the Non-automated Air Traffic Control Service; Col Pilot T. Filipowicz; No 11;

Storms--Still a Threat to the Fliers; Maj B.A. Engr L. Kaczanowski; No 4;

A Different Weather Forecast; Maj B.A. Engr L. Kaczanowski; No 9;

Tracking the Source of Active Interference on the Radar System; Second Lt B.A. Engr W. Nawrotek; Nos 7-8;

Work of the Meteorological Service During Competitions; Maj B.A. Engr M. Ostrowski; Nos 7-8;

Transport Aviation and Logistical Support of Air Force Combat; Maj Engr W. Walczak; No 4;

The Influence of Flights in Radioactive Clouds on the Operation of Electronic Navigation and Communication Devices; Lt Col B.A. R. Wesolek; No 1;

Meteorological Conditions for Flight Training; Capt Dr Engr J. Wrobel; No 3;

The Influence of Turbulence on Low-altitude Flight of an Aircraft; Capt Dr Engr J. Wrobel; Nos 7-8;

Quality of Propellants and Lubricants in the Air Defense Troops; Lt Col B.A. J. Zwolan; No 6;

## Materiel and Maintenance

Do Explosive Starts of the GTD-350 Engines Present a Problem?; Capt Dr Engr A. Adamowicz; No 3;

New USSR Aircraft Designs (Part 3); Col B.A. Engr J. Belcik; No 1;

Homing Systems of Guided Missiles; Maj B.A. Engr B. Buczek; No 3;

Artem Mikoian; P. Butowski; No 10;

Latest Su Aircraft; P. Butowski; No 11;

Metrology, Its Role and Tasks; Lt Col B.A. Engr A. Choluj: No 2:

Planning Service Life of Fuselages in an Air Force Regiment; Capt B.A. Engr J. Dolaniecki; No 12;

Flight Dynamics of an Aircraft with Variable Control Surfaces; Col Prof Dr

Engr Z. Dzygadlo and Lt Col Dr Engr A. Krzyzanowski; Nos 7-8;

Influence of Wing Mechanics on Some Aerodynamic Parameters; Maj B.A. Engr K. Galuch; No 3;

Aerodynamics of a Rocket (Part 1); Lt Col B.A. Engr A. Gotarski; No 1;

Aerodynamics of a Rocket (Part 2); Lt Col B.A. Engr A. Gotarski; No 11;

Analysis of Electric Circuits by the State Variables Method with the Help of a Microcomputer; Lt Col B.A. Engr W. Hofman; No 12;

Causes of Increased Oil Use in the ASh-62IR Engines; Capt B.A. Engr K. Janusiak; No 1;

Meteors in Meteorological Communications; Capt B.A. Engr K. Jesionowski; No 12;

Cooling of Turbine Blades in Aircraft Engines; Maj Engr R. Kaczmarek and Capt Dr Engr M. Orkisz; No 6;

Principles of Joint Operation of a Microcomputer and an Alphanumeric Monitor; Lt B.A. Engr A. Kolosowski; No 6;

Non-horizontal Radar Surveillance; Lt Col Engr M. Kopczynski; No 6;

Combat Use of Air Missiles with Laser Homing Warheads; Col B.A. Engr R. Makowski; No 12;

Modification of the ASh-62IR Engine (Discussion Paper); Lt Col R. Marcinkiewicz; No 1;

Interference Minimization Circuits in Radars; Lt Col B.A. Engr Z. Panek; No 2; Interference Minimization Circuits in Radars (Part 2); Lt Col B.A. Engr Z. Panek; No 3;

Operation of Air Defense Missiles; Col B.A. Engr R. Paradowski; No 11;

Technical Service of Electronic Equipment; Lt Col Dr Engr W. Pawlak and Lt B.A. Engr H. Dabkiewicz; No 1;

Microwave Hoop Antennas; Lt Col Dr Engr W. Pawlak; No 6;

Methods of Increasing the Lift of Aircraft Wings (Part 4); Engr B.A. J. Perlinski; No 5;

Chemical De-icing, Corrosion and Service Life; Engr B.A. J. Perlinski; No 9; An-124 Ruslan; Engr B.A. J. Perlinski; No 11;

Damage to the Crankshaft Bearing of the ASh-62IR Engine Is Dangerous!; Maj B.A. Engr M. Piglas; No 10;

Development Trends in Anti-aircraft Medium-range Missile Systems; Maj B.A. Engr Z. Przezak; Nos 7-8;

Pneumatic-Hydraulic Systems in Missiles With Liquid-fuel Engines; Maj B.A. Engr Z. Przezak; No 9;

Latest Designs of Pulse-Compression Radar Stations; Capt Z. Puchalski; No 9;

Service of Parachute Braking Systems; Lt Col Engr S. Pulyk; No 1; Scheduled Maintenance of the MiG-23; Lt Col Engr S. Pulyk; No 5;

Damage to Aircraft Wheels in the Process of Operation; Lt Col B.A. Engr H. Smolinski and Lt Col B.A. Engr J. Walkiewicz; No 4;

Avenues of Development in Radar Surveillance; Maj Engr w. Stodolny; No 5;

Influence of a Spontaneous Change in the Propelling Nozzle Opening on the Operating Characteristics of the Type "37" Engine; Lt Col Dr Engr R. Szczepanik and Lt Col B.A. Engr T. Kaczynski; No 2;

Development of Repair Facilities of Radioelectronic Troops; Capt J. Swiderski; No 2;

Identification of Carrier Frequency of Pulse Radar Stations; Lt Col B.A. Engr M. Tolkacz; Nos 7-8;

Leakage in the Drive System in Hydraulic Pumps NP34-1T, NP34-2T and NP34M-1T; Lt Col B.A. Engr T. Warecki; No 5; Use of Isotope Sources of Radiation in Landing Systems; Lt Col B.A. R. Wesolek; Nos 7-8;

Damage to the Flight Control System Caused by Turning on the Afterburning in Type 37 Engines; Maj B.A. Engr M. Woloszynski; No 5;

Oscillographic Records in Aircraft Engine Control; Maj B.A. Engr M. Woloszynski; No 9;

Damage to Fuel Lines in Aircraft Equipment; Maj B.A. Engr J. Zuk; No 9; Soviet Early Warning Aircraft Tu-126; No 2;

Indoctrination, Psychology, Medicine

Research and Development Activity of the Military Institute of Flight Medicine; Col Prof Dr M.D. S. Baranski and Col M.D. M. Chormanski; No 4; Sports in Our Armed Forces; E. Bauman; No 5;

Military Penal Law; Maj Navigator M. Czechowski; No 10;

The Role of Instructor Cadres in Molding Discipline and Interpersonal Relations; Maj B.A. Engr R. Dabrowski, No 5;

Propaganda and Indoctrination Work with the Flight Personnel During Exercises; Lt Col B.A. R. Holosyniuk; No 4;

Should the Head of the Training Group Be Helped, and If Yes, Then How?; Lt Col Dr Z. Palutek; No 1;

Command and Indoctrination Work; Maj B.A. I. Sadowski; No 11;

We Should Reactivate the Air League; Col B.A. K. Stec; No 11;

Identification Signs--Distinguishing Marks; Col Dr S. Sledz; No 10;

Psychological Evaluation of Flight Personnel; Lt Col Ph.D. J. Wonicki and J. Turlejski, B.A.; No 2;

Problems of Upbringing in Soldiers with Impaired Health; Lt W. Wiwatowski; No 3:

Following the Champions; Navy Lt J. Zalewski; No 11;

Our Readers' Letters

What I Would Like to Use in Reconnaissance; Capt Pilot Engr R. Baran; No 5; Innovators and Modernization of Equipment; Capt 7. Czapla; No 4; Increasing Efficiency of Cooperation with Regional Air Clubs; Lt Col S. Gorezyea (Res); Nos 7-8;

Fifth Scout Air Meet; Lt Col Dr Engr J. Jagiclski; No 4;

A New Method of Landing Approach (Discussion Ppaer); Maj Pilot M. Kamyk; No 6; A Contribution by Military Members of the SNT NOT [Scientific-Technical Association of the Main Technical Organization] to Professional Improvement; Lt Col B.A. Engr S. Markiel; No 3;

The 4th Symposium of Meteorologists; Maj B.A. Engr M. Ostrowski; Nos 7-8; Poles HaveDFlown Iak-25 and Iak-27; Col Pilot Engr S. Podlesny; No 6; Computers in School--First Experience and Conclusions; J. Spirydowicz; No 5;

## 4. Information

#### Aircraft

Nuclear Munitions on A-10 Planes; No 10; B-1B Bomber Is Deployed; No 5; Cockpit of Lavi Fighter Plane; No 11; Career of F-16 Plane; No 9;
Crash of a Secret US Aircraft; No 12;
MiG-29 on a Visit to Finland; No 12;
NATO Is Setting Up a Lobby for Drones; No 11;
Plan for an Aerospace Aircraft X-30; No 6;
ATF, a Tactical US Fighter of the Future; No 6;
Mirage IV Bomber; No 2;
Fighter-Bomber SaaB-37 Viggen; No 3;
Transport Aircraft C-135 Stratolifter; No 5;
Fighter-Bomber Saab-35 Draken; No 6;
Transport Aircraft C-160 Transal; Nos 7-8;
Transport Aircraft C-130H Hercules; No 9;
Transport Aircraft-Tanker KC-10A Extender; No 11;
Turboprop Training Aircraft with Characteristics of a Jet Aircraft; No 3;

## Helicopters

Accident Rate of Medical Helicopters; No 10; Soviet Mi-26 Helicopter as Seen by the West; No 9;

## Missiles

Anti-aircraft Laser Weapon; No 3; Mistra, Anti-aircraft System; No 2;

## Space

Challenger Shuttle Crash; No 5; Orbital Maneuvering Vehicle; No 3; Interception in Space; No 1; "Mir" Station in Orbit; No 6; The Third Space Launch Complex; NO 2; Creation of US Space Command; No 4; Crew Change in Orbit; No 1;

#### Miscellaneous

Aerosols in the Atmosphere; No 6;
Review of Flight Safety in the US; No 11;
Luftwaffe Mobilization Exercise 44 SLMB; No 12;
Annual Meeting of the Editorial Board; No 3;
Engineers on Microcomputers; No 12;
Number of Licensed Civlian Pilots in Selected States by Yearend 1983; No 9;
Air Force and Propaganda; No 1;
Air Assault of the US Against Libya; No 9;
Infrared Vision Device VNVA-320; No 1;
Innovative BL Conference; No 5;
New Electronic Warfare Equipment; No 10;
New Electronic Warfare Equipment; No 10;
Poles Are World Champions Again; No 10;
Preparations for Chemical Warfare; No 11;
State-sponsored Air Piracy; No 2;

Traffic in Some European Airports in 1983; Nos 7-8;
Air Forces of the Netherlands; No 9;
Success in Gordon-Benett Cup Competitions; No 1;
Combat Training of Luftwaffe Pilots in Canada; No 12;
Accident Rates in the Air Forces of Selected NATO Countries; Nos 7-8;
Combat Readiness of the US Air Force Is Improving; No 9;
Automated Command System of NATO Air Forces; No 6.

## Main Political Administration Journal

Warsaw WOJSKO LUDOWE in Polish No 12, Dec 86 pp 100-104

[Excerpts] Documents - Editorials - Topical Articles

Human Factor in the Development of the Soviet Army; Col Tadeusz Badowski; No 2;

Serving the Cause of Peace Under the Blue Flag; Gen Arms Jozef Baranski; No 5; Moral Order; Gen Arms Dr Jozef Baryla; No 5;

Peace and Social Progress Are the Issue (28th CPSU Congress [as published]); Col Zdzislaw Czerwinski; No 2;

Honorary Register of Soldiers' Deeds; No 12;

At the Historic Juncture; Gen Army Aleksei Lizichev; No 6;

On the Way to Communism (on the eve of the 27th CPSU Congress); No 1;

In Our Opinion; Nos 1 Through 12;

Thirty-five Years of the Military Political Academy; Gen Div Wladyslaw Polanski; No 12;

Responsible and Trustworthy Partner (Congress of Reformed Polish Trade Unions): No 12:

Reflections About the 27th CPSU Congress, No 4;

Encouraging Creative Activity; Gen Div Dr Tadeusz Szacilo; No 4;

Program of Creative Continuation (on the eve of the 10th PZPR Congress); Mieczyslaw Witczak; No 2;

## The 10th PZPR Congress

Efficiency of Learning Marxism: Col Tadeusz Badowski: No 5:

Responsibility--Yours and Others (Implementing the Resolutions); Col Tadeusz Badowski; No 7;

Education by Technology Has a Great Role to Play (Battle for the Party's Power and Authority); Col Prof Dr Waldemar Banka; No 6;

Everything Depends on People (Implementing the Resolutions); Maj Dr Ryszard Beldzikowski; No 8;

Evolution of the Patern of Party Guidance; Prof Dr Artur Bodnar; No 6;

Political Discipline Is Called for (Implementing the Resolutions); Prof Dr Artur Bodnar; No 7;

Involvement of Basic Elements Is Decisive (Implementing the Resolutions); Col Dr Leonid Bujan; No 8;

Updating and Improving the Style of Party Activities (Implementing the Resolutions); Lt Col Jozef Dalkiewicz; No 9;

Direction: Efficiency of Party, Ideological and Indoctrination Work; Rear Adm Ludwik Dutkowski; No 9; Congress Resolutions in the Basic Party Organization (Implementing the Resolutions); Maj Jerzy Germaniuk; No 7;

Military Contributions in the Working Commissions of the 10th PZPR Congress;

Changes of the Class Structure in Social Perception; Prof Dr Bronislaw Golebiowski; No 5;

Reform, Rebirth and Understanding (Implementing the Resolutions); Prof Dr Bronislaw Golebiowski; No 7;

Start with Yourself (Battle for the Party's Power and Authority); Senior Staff Sgt Eugeniusz Gorsiak; No 6;

Invoking Moral Models (Battle for the Party's Power and Authority); Col Dr Jan Gozdziuk; No 4;

Need Brought Us into Being; Gen Bde Eugeniusz Grabowski; No 10;

First of All, in the Basic Party Organization (Implementing the Resolutions); Capt Jozef Hanulak, No 7;

Greater Social Involvement; Prof Dr Longin Indisow; No 7;

For Social Morality Compatible with the Ideals of Socialism; Col Prof Dr Wladyslaw Iwaniec; No 6;

Time Has Come for the Implementation Effort (Implementing the Resolutions); Col Prof Dr Wladyslaw Iwaniec; No 8;

How to Produce and How to Distribute; No 8;

What Is Polish Reality and How to Change It (Thoughts About the Draft PZPR Program); No 4;

School of Thinking (Implementing the Resolutions); Andrzej Jakusz; No 11;

Some Conclusions from Analysis (Battle for the Party's Power and Authority); Lt Col Antoni Jaskiewicz; No 5;

What Is the Most Harmful; (Battle for the Party's Power and Authority); Col B.A. Zdzislaw Jatczak; No 3;

On a Broad Front (Battle for the Party's Power and Authority); Lt Col B.A. Jozef Kaniecki; No 4;

Facts Are the Proof (Implementing the Resolutions); Maj Wlodzimierz Kaleta, No 11;

Party Members Hold the View of the Party (Battle for the Party's Power and Authority; Cmdr Dr Adam Karpinski; No 5;

On the Style of Party Work; Miroslaw Karwat; No 4;

Party and the Issues of the Period of Transition; Miroslaw Karwat; No 6;

The Philosophy of Needs (Implementing the Resolutions); Miroslaw Karwat; No 7; First We Must Gain a Thorough Knowledge (Implementing the Resolutions); Lt Col Roman Kaufman; No 9;

Only Specifics Matter (Implementing the Resolutions); Lt Col Ryszard Kloc; No 8;

Direction: Efficiency of Party, Ideological and Indoctrination Work; Gen Bde Tadeusz Kojder; No 9;

If You Want to Harvest, Do the Sowing First (Implementing the Resolutions); Capt Stanislaw Kowalski; No 11;

New Ways to New Ends (Implementing the Resolutions); Lt Col B.S. Engr Adolf Krakowski; No 7;

People Are Crucial (Implementing the Resolutions); Lt Janusz Krzysztofik; No 11;

Party Line Means Efficiency (Implementing the Resolutions); Capt Jerzy Kujawa; No 9;

The Roadblocks of Inertia (Battle for the Party's Power and Authority); Col. Byszard Maluta; No 5;

Adhering to the Principles of Socialist Morality (Battle for the Party's Power and Authority); Col Stanislaw Mazurkiewicz; No 3;

Direction: Effectiveness of Party, Ideological and Indoctrination Work; Col Prof Dr Mieczyslaw Michalik; No 9;

Leninist Norms of Party Life; Wlodzimierz Milanowski; No 4;

Style of Party Work--Regularities and Irregularities; Wlodzimierz Milanowski; No 5:

Path of Renewal and Struggle; Wlodzimierz Milanowski; No 6;

Dialectics of Social Action (Implementing the Resolutions); Wlodzimierz Milanowski; No 7;

Direction: Efficiency of Party, Ideological and Indoctrination Work; Col B.A. Leon Morawski; No 9;

Meeting the Needs. Reports from Party Conferences of Military Districts and Services of the Armed Forces (Implementing the "condutions); No 11;

The Image and Goals of the Current Five-year Period (Fr the CC PZPR Theses); No 5:

Many Difficult Problems Still Remain (Battle for the Party's Power and Authority); Lt Zbigniew Poszyler; No 3;

The Review of Structures and Certification of Positions; No 12;

Cooperation of Service and Social Functionaries Is Necessary (Battle for the Party's Power and Authority); Col B.A. Stefan Butkowski; No i;

On the Course of the Pre-congress Campaign in the Armed Forces; Col Henryk Butkowski; No 6;

The Kosciuszko Unit Says "Yes" to the Resolutions of the 10th [PZPR] Congress (Implementing the Resolutions); Lt Col B.A. Tadeusz Rzepecki; No 10;

We Will Defend Peace Against Any Enemy; Gen Army Florian Siwicki; No 7;

To Oppose Boldly All Manifestations of Evil (Battle for the Party's Power and Authority); Col Henryk Stachowiak; No 6;

Social Awareness as an Important Motivating Factor (Implementing the Resolutions); Col Prof Dr Czeslaw Staciwa; No 7;

Leadership, Guidance and Service; Gen Div Dr Tadeusz Szacilo; No 7;

Direction: Efficiency of Party, Ideological and Indoctrination Work; Gen Div Dr Tadeusz Szacilo; No 9;

Following up a Party Recommendation (Implementing a Resolution); Zygfryd Szukaj; No 11;

Weaknesses Should Not Be Passed over in Silence (Battle for the Party's Power and Authority); Capt Jersy Szukala; No 5;

Calling Evil What It Is (Battle for the Party's Power and Authority); Col M.D. Zbigniew Trojanowski; No 5;

Meeting the Needs and Expectations of the Professional Group (Implementing the Resolutions); Second Lt B.A. Ryszard Trojanowski; No 10;

Our Own Document (Implementing the Resolutions); Lt Col Andrzej Tyszkiewicz; No 10;

The Waraaw Mechanized [Infantry Brigade] (Implementing the Resolutions); No 10;

Party Encouragement and Control (Battle for the Party's Power and Authority); Col Prof M.D. Zbigniew Wasek; No 4;

Acceleration is the Goal; Mieczyslaw Witczak; Nos 10-11;

Direction: Effectiveness of Party, Ideological and Indoctrination Work; Gen Bde Prof Dr Leslaw Wojtasik; No 9; In the Silesian Military District (Implementing the Resolutions); No 12;

A Congress of Hope and Realism; No 7;

From Biographies of the PZPR; No 3;

Direction: Effectiveness of Party, Ideological and Indoctrination Work; Gen Bde Albin Zyto; No 9;

Ideology, Politics, Economics

When We Say "Internationalism"; Col Tadeusz Badowski; No 8;

Does the Class Nature of Marxism Rule out a Universal Peace Philosophy?; Col Prof Dr Jozef Borgosz; Nos 1-2;

Military-Technical Alienation and Its Subjective Consequences; Col Prof Dr Jozef Borgosz; Nos 11-12;

The Essence and Nature of Global Problems Facing Mankind; Col 7dzislaw Czerwinski; No 12;

Considerations on the Leading and Guiding Role of the Party; Prof Dr Edward Erazmus; No 2;

National Understanding: Col Prof Dr Longin Indisc : No 3;

Social Sciences and Development of Personality; Frof Dr Longin Indisow; No

Social Sciences and Development of Personality; Col Prof Dr Longin Indisow; No 10;

Credit Policy as an Instrument of Neocolonialism; Dr Tadeusz Twinski; No 7;

What Kind of Working Class?; Dr Karol B. Janowski; No 4;

Moral Values and Models in the Era of Romanticism (From the History of Lay Ethical Thought in Poland - 6); Dr Jozef Jaron; No 3;

Positivists and Marxists on Ethics (From the History of Lay Ethical Thought in Poland -7); Dr Jozef Jaron; No 9;

Proponents of the Lwow-Warsaw School on Morality (From the History of Lay Ethical Thought in Poland -8); Dr Juzef Jaron; No 11;

The Unity of Economy, Politics and Ideology; Miroslaw Karwat and Wlodzimierz Milanowski: No 9:

CEMA at a New Stage of Development; Lt Col Dr Leslaw Kubiak; No 8;

Ideological Aggression in the Sphere of Morality; Col Prof Dr Mieczyslaw Michalik; No 4;

The Party of Struggle for Socialist Transformation; Wiodzimierz Milanowski; No 1:

Selected Issues of the Theory of Socialist Construction; Wlodzimierz Milanowski; No 12;

On Ideological Divisions of the World; Maj Dr Tadeusz Mitek; No 2;

Catholic Ethics -- Fundamentals and Changes; Maj Dr Tadeusz Mitek; No 10;

The Young Generation and Scientific-Technical Progress (After the 27th CPSU Congress); Jerzy Muszynski; No 3;

CPSU and PZPH Programs: Similarities and Differences; Jerzy Muszynski; No 7; Problems of Labor in the Papal Encyclic; Second Lt B.A. Henryk Polehowski; No

Determinants of Progress; Col B.A. Urban Staniszewski; No 4; In Our Common Interest; Lt Col Anatolii Trifenov; No 8;

# Indoctrination, Training, Commanding

From Assumptions to a Bumpy Practice; Col Tadeusz Badowski; No 6;

Indoctrination System of a Military Academy; Col Prof Dr Waldemar Banka; No 12:

Who They Appreciate, What They Respect; Maj Dr Ryszard Beldzikowski; No 10;

Relationships (Interpersonal Relations--How to Elevate Them?); Lt Col Ireneusz Boguszewicz; No 2;

Reflections on the Efficiency of Work (On the Agenda of the 13th Central Conference for Bational Management); Lt Col Ireneusz Boguszewicz; No 4;

Initiatives Are Organtly Sought; Lt Col Ireneusz Boguszewicz; No 5;

Forced Emulation, or a Treatise on a False Method; Lt Col Ireneusz Boguszewicz; No 7;

Troublesome Graduates; Lt Col Ireneusz Boguszewicz; No 12; Some Remarks on the Battle Instinct; Lt Jan Borkowski; No 5;

Spontaneity and Conditions for It (Observations on Courage - 10); DrMiroslaw Brzostek; No 1;

Moral Aspects (Observations on Courage - 2); Dr Miroslaw Brzostek; No 3;

On Some of Its Manifestations (Observations on Courage - 3); Dr Miroslaw Brzostek; No 4:

Problems With Definition and Evaluation (Observations on Courage - 4); Dr Miroslaw Brzostek; No 6;

Battle Virtues; Dr Miroslaw Brzostek; No 11;

Several Remarks on ZSMP [Union of Socialist Polish Youth] Activity; Capt Zbigniew Ciereszko; No 7;

Who Should Be Trained in Higher Officers' Schools; Lt Col Dr Boduen Ciesielski; No 10;

Can a Second Lieutenant Conduct Indoctrination Classes?; Col Bernard Czerepok;

Labyrinths of Briefing; Col Bernard Czerepok; No 6;

Advantages and Disadvantages of Mutual Indoctrination Classes; Col Bernard Czerepok; No B;

Agitators at the Maneuvers; Lt Col Dr Bronislaw Dziaduch; No 9;

Clipping the Wings; Janusz Figura; No 8;

Factors of Integration of Military Cadres; Lt Col Dr Jozef Fraczek; No 9;

A Broader Context of Causes; Lt Zdzislaw Gazdowicz; No 3;

Upbringing of Young People in the OHP [Volunteer Labor Brigades]; Col Dr Bronislaw Getka; No 11;

Problems Which Can Be Prevented; Col Dr Zygmunt Hazuka; No 10;

To Be or Not to Be... in the ZSMP, Lt Stanislaw Jarmoszko; No 1;

The Beginning for Young Cadres: Lt Stanislaw Jarmoszko: No 3:

From the Experience of Teaching Military History; Col Waldemar Jaworski; No 3; Standard Conditions (Interpersonal Relations--How to Ennoble Them); Lt Col Andrzej Kamienski; No 2;

Elements Which Link and Assist Us; Capt Andrzej Kapusta; No 1; From Informal Rites to Legal Customs; Capt Andrzej Karski; No 7;

Relationships Which Should Be Kept in Mind; Lt Col Dr Edward Karczewski; No 11;

Volunteer Work by the Armed Forces--Achievements and Plans; Ryszard Kazmierczak and Col Janusz Gorczynski; No 8;

Individualization in the Reinforcement of Discipline (From the Experience of the Soviet Army); Col Prof Dr N. Kir'iashov; No 11;

Integrated Circuits; Konstanty Korzeniecki; Nos 4--5;

Acquiring Mutual Knowledge; Konstanty Korze lecki; No 9;

Commander of a Small Unit and Crime Control; Capt Wojefeck Kewalski; No 6;

Absences Without Official Leave--Premises and Causes; Col S.A. Zenon Krajewski; No 4;

Psychological Background of Absences Without Official Leave; Lt Col Or Byzzard Kruszewski; No 11;

We Mold the Future Today: No 7:

Worldview and Its Societal Functions; Lt Col Prof Dr Jerzy Kunikowski; No 9; Partnership and the Efficacy of Upbringing; Col Dr Janusz Lachewicz; Nos 10-11;

Not in the Ranks, But Still Active: Col Roman Les (Ret); No 5;

Why Does Man Age; Col M.D. Jan Lancucki; No 11;

Social Activists and Preteniers; Col Ryszard Maluta; No 1.;

Looking at the Basic Party Organization and Its Secretary; Lt Col Dr Leslaw Malowiejski; No 3;

Computer Science and Medicine; Col Prof M.D. Jan Miszczak; No 4;

Innovations and Risk; Lt Col R.A. Stefan Naczynski; No 6;

Basic Party Organizations of Headquarters -- Are They and Should They Be Leading?; Col Ignacy Olszewski; No 5;

The Difficult Art of Conducting Conversation; Maj Czerlaw Parka; No 2;

The Difficult Art of Getting to Know Your Subordinates; Maj Czeslaw Parka; No

A Different View of Discipline; It Krzysztof Pirecki; No 1;

On the Need for Interpersonal Upbringing; Lt Col Dr Rysward Pocwiardowski; No 10;

More on Individual Party Talks; Capt Zbigniew Poszyler and Lt Stanislaw Jarmoszko; No 9;

A Soldier's Portrait Printed in Fine Print; Lt Col Dr Stanislaw Poweska; No 7; A Look at Commanders of Small Training Units; Maj Zbigniew Sadowski; No 3;

Youth Communist League Presence in the History of the Army and the State; Lt Col Francissek Severyn; No 2;

Artions Required by the Needs of the Moment and Common Sense (On the Agenda of the 13th Central Conference for Rational Management); Lt Col Franciszek Severyn; No 4;

Practical Training of Future Political [Officers]; Lt Col Franciszek Seweryn; No 5:

A Soldierly Understanding of Party Line; Lt Col Franciszek Severyn; No 8;

The Essence and Reasons for Changes in Disciplinary Regulations; Col Jerzy Siciarz; No 5;

Councils of Professional Non-commissioned Officers in Betrospect; Capt Marek Steniawski; No 3;

Garrison Clubs and Cultural Life of the Cadres; Maj Dr Josef Skrzypiec; No 1; Achievements and Shortcomings of Culture in the Armed Forces in the Years 1981 - 1985; Maj Dr Josef Skrzypiec; No 3;

Social Sciences and Socialist Development in Our Country; Col Prof Dr Stanislaw J. Sokolowski; No 2;

Social Discipline and Service in the Armed Forces; Maj Jan Szewezyk; No 5;

Achievements and Outlook for Economic Studies in the Armed Forces; Col Prof Dr Waclaw Stankiewicz; No 4;

Morale and Attitudes; Col Dr 7dzislaw Ulinsz; No 12;

Military Education of Graduates from Civilian Colleges; Lt Col Dr Franciszek Ulasiuk; No 10;

Social and Pedagogical Diagnoses; Lt Marek Walencik; No 5;

Party and Indoctrination Work in Combination; Col Dr Piotr Wasilewicz; No 8; Ideological and Moral Requirements for Graduates; Col Dr Wladyslaw Wyruch; No 10;

Advice--Proposals--Consultation

In Aid to Non-commissioned Officers' Trainers; Col Bernard Czerepok; No 9; Political Parties and Armed Struggle; Lt Col Dr Mieczyslaw Starczewski; Nos 6, 9:

# Rejoinders

A Look Backstage; Lt Jan Borkowski; No 6; Attention to Personality Traits!; Second Lt Waldemar Debski; No 6; How to "Finish off" a Lively Topic?; Maj Dr Tadeusz Mitek; No 6; Culture of Health Care and Its Propagation; Col Dr Marek Szczepkowski; No 6;

## Contemporary World

A Movement from Under the Sign of Picasso's Dove of Peace; Col Tadeusz Badowski; No 1;

Domination Through Information; Wieslaw Cetera; No 3;

Contemporary German Revisionism--Origin, Essence and Goals; Capt Dr Zbigniew Cieckowski; No 8;

Contemporary German Revisionism -- Looking for Means to the End; Capt Dr Zbigniew Cieckowski; No 10;

A Requiem for Apartheid?; Maj B.A. Andrzej Czajka; No 1;

Trends and Contradictions in the Contemporary World; Col Zdzislaw Czerwinski and Col Edward Wojcik; No 11;

How to Enter the 21st Century Without Nuclear Weapons: No 3;

Why Is Disarmament So Difficult to Achieve?; Col Prof Dr Zygmunt Kolodziejczak; No 6;

Ireland - a Difficult Independence; Wawrzyniec Konarski; No 5;

Concentration of Economic Power in the FRG; Dr Wlodzimierz Korzycki; No 2;

FRG: Overcoming Barriers in Arms Exports; Dr Wlodzimierz Korzycki; No 5:

Premises and Goals of the "German Policy" of the FRG; Dr Wlodzimierz Korzycki; No 9;

FRG: Christian Democrats on the Eve of Elections to Parliament; Dr Wlodzimierz Korzycki; No 12;

American Trade in Arms and Third World Countries; Lt Col Dr Janusz Michalczak; No B;

FRG--A Military Picture; No 9;

Philosphical and Methodological Issues in Research (Soviet Philosophy of Peace - 6); Col Prof Dr Ryszard Rosa; No 1;

Causes of Contemporary Wars (Soviet Philosophy of Peace - 7); Col Prof Dr Ryssard Rosa; No 2;

Bases and Premises for Peace in the Contemporary World (Soviet Philosophy of Peace - 8); Col Prof Dr Ryszard Rosa; No 3;

Essence and Objectives of Wars in the Contemporary Epoch (Soviet Philosophy of Peace - 9); No 4;

Essence and Object of Peace (Soviet Philosophy of Peace - 10); Col Prof Dr Ryszard Rosa; No 6;

Social Nature of War and Peace Under Current Conditions (Soviet Philosophy of Peace - 11) Col Prof Dr Ryszard Rosa; No 7;

Ways, Forces and Means of Ensuring and Defending Peace (Soviet Philosophy of Peace - 12); Col Prof Dr Byszard Bosa; No 8;

China--Banking on Reforms; Sylwester Szafarz; No 3;

Foreign Policy of the PBC with Regard to Socialist Countries; Sylwester Szafarz; No 7;

PRC and Developed Capitalist Countries; Sylwester Szafirz; No 12;

Disarmament Talks--Outlook for a New Stage; Dr Zdzislaw Szczerbowski; No 1; Reagan's Military Policy in the Beginning of the Second Term; Dr Zdzislaw Szczerbowski; No 4;

Eurostrategic Disarmament Dialogue-Chiaces for an Agreement; Dr Zdzislaw Szczerbowski; No 7;

Militarization of Space and Disarmament Talks; Dr Zdzislaw Szczerbowski; No 9; Reagan's Military Policy--Premises and Implementation; Fr Zdzislaw Szczerbowski; No 10;

On the Way to Yet Another Gorbachev-Reagan Summit; Dr Zdzislaw Szczerbowski; No 11:

Talks on Nuclear Weapons Test Ban; Dr Zdzislaw Szczerbowski; No 12; Political and Military Overview 1985; Col Edward Wojcik; No 1;

Strategic Nuclear Triad -- Bombers; Col Edward Wojcik; No 4;

The 27th CPSU Congress--A Global System of International Security; Col Edward Wojcik; No 5;

Strategic Nuclear Triad-Land-based Missiles; Col Edward Wojcik; No 6; The Seaborne Pillar of the Strategic Nuclear Triad; Col Edward Wojcik; No 7;

The 3rd Congress of Polish Science

Research and Development in Polymer Chemistry; Col B.A. Engr Aleksander Bednarski; No 3;

Economic Security -- A Cause for the Entire Nation; Col Frof Dr Tadeusz Grabowski; No 3;

Determinants of Modern Armed Forces; Lt Col Dr Jerzy Kunikowski; No 3; Microbiology and Our Health; Col Prof Dr Juliusz Reiss; No 3;

Science and Culture

Culture in the First Echelon; Maj Dr Jozef Skrzypiec; No 4; Dilemmas of Cultural Evaluation; Maj Dr Jozef Skrzypiec; No 9;

History

The Catholic Church on the Eve of the 2nd [Polish] Republic; Wieslaw Cetera; No 1:

Church Administration in New Frontiers (From Behind the Bronze Gate); Wieslaw Cetera; No 2;

Benediction for Pilsudski; Wieslaw Cetera: No 5:

Nationalization of Industry (Calendar Pages); Januar Figura; No 1;

A Revolution or an Uprising? (Calendar Pages); Janusz Figura; No 2;

Workers of Paris at the Barricades (Calendar Pages); Januaz Figura; No 3;

Ten From the Pawiak [Prison] (Calendar Pages); Janusz Figura: No 4:

An Armed Coup (Calendar Pages); Janusz Figura; No 5;

A Referendum 40 Years Ago (Calendar Pages); Janusz Figura; No 6;

The Army of Black Crosses (Calendar Pages); Janusz Figura; No 7;

Revolutionary Retaliation (Calendar Pages); Janusz Figura; No 8;

A Sinister Game at the Expense of Poland (Calendar Pages); Janusz Figura; No 9:

In the Name of Freedom (Calendar Pages); Januar Figura; No 10;

An Instrument of Aggression (Calendar Pages); Janusz Figura; No 11;

Chronicle of the Soviet Army; No 2;

Warsaw's Part in Uprisings of National Liberation; Capt Tadeusz Krzastek; No 2;

The Empire of the [German] Reich-II (History of Big Capital); Capt Jerzy Kujawa: No 3;

A Constitution of 50 Years Ago; Second Lt H.A. Edward Mazurkow; No 12;

Verification of Indigenous Population on the Regained Lands (1945-1948); Maj Dr Kazimierz Pajak; No 8;

Attempts to Establish Contacts Across the Vistula After 1 September 1944; Lt R.A. Zbigniew Poplawski; No 8;

A Marshal of Two Peoples; Col Ireneusz Ruszkiewicz; No 12;

Talking About Lenino ...; Col Tadeusz Rawski; No 10;

Evolution of the Doctrine (From Behind the Bronze Gate); Dr Michal Skorupski; No 18;

Concepts of Struggle for Independence (1795-1918); Lt Col Dr Lech Wyszczelski; No 5.

# Civil Defense Journal

Warsaw PRZEGLAD OBRONY CYWILNEJ in Polish No 12, Dec 86 pp 23-26

[Excerpts] Feature Articles

An Attempt to Outline Opportunities for Uning Students and Graduates of Some Post-High School Medical Colleges in Civil Defense; Romana Borkowska, B.A.; No 10;

Satellite Photographic Reconnaissance; Lt Col Dr Engr Wieslaw Derkacz; No 5; Deliveries of Equipment for the Needs of Civil Defense; Col R.A. Stanislaw Dominezuk; No 1;

A General Overview of Injuries to the Human Body in the Event of a War; Col M.D. Jerzy Drapiewski; No 4;

Toxic Vapors and Gases: No 9:

Maintenance of Civil Defense Alarm Systems; Maj Engr Waldemar Gwozdzinski; No 2:

Projecting Demand for Civil Defense Publications; Col B.A. Jerzy Jaworski; No 7:

Bibliographic Handbook for a Civil Defense Instructor; Col B.A. Jerzy Jaworski; No 8;

Can the Evil Be Prevented?; Col Engr Jan Korpalski; No 1;

Nuclear Electromagnetic Impulse; Col Engr Jan Korpalski; No 11;

How to Teach the Students to Use Contamination Detectors? Lt Col B.A. Engr Bronislaw Kowalczuk; No 8;

Counteracting the Consequences of Internal Radioactive Contamination; Lt Col B.A. Engr Bronislaw Kowalczuk; No 3;

Visual Propaganda Aids; Wieslaw Kryszak B.A.; No 5;

Lectures as a Part of Civil Defense Training; Col Jan Krzywonos; No 6;

Rational Management of Civil Defense Equipment; Lt Col Kazimierz Markuszewski; No 5;

Amended Guidelines for Prepairing Protective Structures for the Population; Col B.A. Engr Aleksander Motty; No 2;

Purification and Upgrading of Potable Water; No 7;

Training of Officer Cadets in the SPR [Reserve Officer Cadet School] in Wegorzewo; Col B.A. Engr Marian Sierocki; No 12;

New Training Subjects in Civil Defense; Col B.A. Engr Marian Sierocki; No 3; Biological, Geophysical and Meteorological Weapons; Maj Ryszard Slawinski and Maj Aleksander Wyporski; No 8;

Use of Reports on the Average Winds; Franciszek Starorypinski; No 11;

Evacuation and Dispersion of Civilian Population in the Past and at Present; Jerzy Suwart, B.A.; No 8;

Evacuation and Dispersion of Civilian Population in the Past and at Present (conclusion); Jerzy Suwart, B.A.; No 10;

Polish Civil Defense in the Years 1934-1984; Jerzy Suwart, B.A.; No 3;

Polish Civil Defense in the Years 1934-1984 (conclusion); Jerzy Suwart, B.A.; No 4;

Civil Defense in Light of the 10th PZPR Congress; Jerzy Suwart, B.A.; No 12; Issues Resulting from the Use of Chemical Weapons; Col Dr Jerzy Szalek; No 7; Psychological Consequences of the Threat to Use Weapons of Mass Destruction and Their Practical Use; Col Dr Jerzy Szalek; No 6;

Society in Contemporary War; Col Dr Jerzy Szalek; No 1;

Disinfectants Used in Agriculture: No 6;

Psychochemical Toxic Agents; Col S. Titov; No 8;

Thirty Years of PRZEGLAD OBRONY CYWILNEJ; No 1;

Analysis of the "Zulawy-86" Civil Defense Exercise; Head of the National Civil Defense Gen Arms Tadeusz Tuczapski; No 9;

Civil Defense in the Face of New Tasks; Head of the National Civil Defense Gen Arms Tadeusz Tuczapski; No 2;

The Walls May Collapse; A. Vakhtin; No 12;

Doses of Ionizing Radiation; Lt Col Stanislaw Warkocki; No 8;

Study of Atmospheric Contamination over the Territory of the PRP After Nuclear Test Explosions; Lt Col Ryszard Wesolek (Technical Institute of the Air Force); No 5;

Toxins--Modern Combat Toxic Agents; Lt Col Prof Dr Engr Zygfryd Witkiewicz and Maj B.A. Engr Jerzy Mazur; No 2;

On the Training of Civil Defense Units and the Populace; Lt Col Jozef Zacierka (Ret); No 11;

The Fire Department of Warsaw Is Already 150 Years Old; Fire Dept Col Zdzislaw Zalewski; No 7;

Our Reports

Exercises as a Test of Civil Defense Preparedness; Grazyna Dembowska; No 1; Exercises In Bialystok Province; Grazyna Dembowska; No 12;

On the Glorious Land of Zulawy; Grazyna Dembowska; No 7;

A Meeting at the Capital City IOC [Civil Defense Inspectorate]; Col Roman Gumulski (Ret); No 10;

Civil Defense at the Praga Hospital; Col Roman Gumulski (Ret); No 4;

The First Not in Name Alone; Boleslaw Jagielski; No 10;

A National Briefing for Key Civil Defense Cadres; No 1;

In the Cooperative of the Handicapped "NOMA"; Stanislaw Kwirowski; No 9;

A Good Beginning for the MOSOC [City Training Center of Civil Defense] in Biala Podlaska; Stanislaw Zimnicki; No 11;

Polish Red Cross Instructs and Helps; Stanislaw Zimnicki; No 5;

# Views--Discussions--Polemics

Simulated Exercise -- the Highest Form of Training; No 5;

A Surprise Simulated Exercise Does Not Reveal All Results of Training; No 7; Is It Important?; No 6;

Operation Readiness of Civil Defense Equipment; No 8;

How Can the Issue of Uniforms for Members of Civil Defense Units Be Solved?;

How Is the Air-tightness of a Protective Shelter Tested? No 11;

Some Thoughts on Propagating Civil Defense; No 3;

How to Do Maintenance?; No 10;

Labyrinths of Control; No 11;

In My Opinion: No 1:

In My Opinion; No 4;

It Is Necessary to Teach Radiology and Toxic Agent Toxicology in Agricultural Academies and Vocational Schools; No 12;

Civil Defense as a Science; No 2;

For Bettr Education in Civil Defense; No 7;

On Simulated Training and Exercises; No 6;

On Using Personnel Reserves in Civil Defense Units; No 12;

On Good Results of Training; No 7;

The Role of Professional Information; No 5;

Trainee -- A Forgotten Person; No 6;

Personal Clothing Instead of Uniforms: No 4:

Maintenance and Operation Readiness of Civil Defense Equipment; No 11;

## Library of PRZEGLAD OBRONY CYWILNEJ

Propagation of Civil Defense: Col B.A. Czcslaw Czudec (Res): No 10;

Aerial Bombs; Engr B.A. Jerzy Crzegorzewski; No 11;

Aerial Bombs (conclusion); Engr B.A. Jerzy Crzegorzewski; No 11;

Injuries of Animals Caused by Exposure to Radiation; Prof Dr Stefan Kossakowski; No 3:

Small Units for Decontaminating Territory; Engr B.A. Aleksander Kulawiak; No 1:

Small Decontamination Units Designated to Service PZSan [State Public Health Authority]; Engr B.A. Aleksander Kulawiak; No 5;

Civil Defense of Rural Areas; Col Dr Zygmunt Lyjak; No 7;

Protection of Agricultural Plants and Fodder in the Event of Danger and War; Col Dr Zygmunt Lyjak; No 7; Protection of Agricultural Plants and Fodder in the Event of Danger and War; Col Dr Zygmunt Lyjak; No 8;

Protection of Agricultural Plants and Fodder in the Event of Danger and War (conclusion); Col Dr Zygmunt Lyjak; No 9;

Interpolation of Coefficients in Predicting the Consequences of Nuclear Strikes; Lt Col B.A. Engr Czeslaw Smagala;

Preparation of Forces and Means for Protecting Real Estate of Cultural Institutions; Col Engr Stanislaw Walczak (Ret); No 4.

9761 CSO: 2600/448 MILITARY POLAND

# ADVANCES IN COMPUTERIZED CIVIL DEFENSE PROGRAMS

Warsaw PRZEGIAD OBRONY CYWILNEJ in Polish No 1, Jan 87 pp 4-6

[Article by Lt Col Magister Engineer Stanislaw Strzesniewski: "Computer Systems In Light of Civil Defense Needs"]

[Excerpts] Improving organized activities depends on their efficient and rational control. From the theoretical side, this problem is the concern of ergology, or the science of action. Derivative branches of ergology include, among others, praxiology, or the science of improving actions as well as the theory of organization and control. However, cybernetics and information science—more accurately computer systems, became the instruments for applying the theoretical foundations of theses sciences into practice.

Trends and Development Prospects for Computer Science In the CEMA Countries, Especially Poland

The rapid development of telephone systems (including the use of fiber-optic and satellite links) now taking place in the highly developed countries confirms the absolute need to create teleinformation systems in our country also. The construction of such systems is a very complicated undertaking requiring close cooperation among design-application offices, industrial plants and scientific research divisions. Teleinformation systems, a domestic one as well as one that is integrated on the CEMA scale, would permit effective use of standard hardware and software as well as data banks. The 36th CEMA Session in Budapest was devoted to this problem.

The Budapest meeting confirmed that an integrated macrosystem could arise only as a result of coordinated cooperation among CEMA members and numerous branches of the economy, for example, the telephone, computer, electronic and radio-TV industries as well as institutes doing space research. The construction of such a systems cannot be accomplished in one step; it must be realized over many stages, step by step, as international experience is achieved and especially as essential funds are received to realize such a great undertaking. This activity must be based on a common program to develop a macrosystem in the form, of course, of an international computer network. At one time our capabilities in this area were relatively greater. Presently our capabilities have diminished because of the crisis, but they are still significant. Such a macrosystem is in the process of being realized. Right now

it is at the Ryad family of computers stage (the unified data teleprocessing systems called TELE-JS in short). In its final form, the task of TELE-JS, based on Ryad computers, will be to gather within its own data bank center information gathered and processed within the frameworks of domestic computer systems. The data will be used by all users of the macrosystem. Thus, from the viewpoint of information, it will be a macrosystem that gathers and distributes information similar in its structure to a direct information system but more complex conceptually and functionally. It is projected that the basis TELE-JS macrosystem, very typical of most direct information systems, will consist of the following units:

-- a central processing computer;

-- a disk processor (to serve data bases);

-- a communications processor, also known as the teletransmission unit;

--data transmission equipment (modems, data protection and code conversion equipment);

-telecommunications lines;

-- remote subscriber terminals.

According to the CEMA decision, for the socialist countries market, Poland is tasked to produce Ryad 30 and derivitive computers, magnetic tape stations, printers, monitors with keyboards, perforated card readers and data transmission equipment (modems). The USSR is tasked to produce Ryad 40 and Ryad 50 computers; Hungary, the Ryad 10; Bulgaria, disk memories; Czechoslovakia, card readers and Ryad 20 computers; and the GDR, most of the named equipment (today the GDR leads; in the early 1970s, Poland led).

In addition to medium and large power equipment, the production and application of microcomputers are expanding rapidly in Poland and the USSR, thanks to the development of microprocessing technology. In the USSR, personal computers are a success.

"We must initiate a program similar to the one we initiated after the October Revolution to eliminate illiteracy, " is the way Prof Anatolij Aleksandrov, chairman of the USSR Academy of Sciences, described the computerization trend in that coutry. The USSR is now producing the AGAT microcomputer (8 bits; 300,000 operations per sencond; 256kB internal memory). Shortly, about 1 million of these microcomputers will be available on the market. People will need to be trained to use them, but this is possible. The new ELEKTRONIKA BK-0010 microcomputer (16 bits) will also be marketed shortly. It will become the primary microcomputer for schools. Work is already proceding on a 32-bit microcomputer, which will be a turning point. In Poland, massive purchases are made abroad, especially in the West (primarily by private individuals). In addition, numerous Polonian firms produce their own equipment or copy and adapt various Western products for the Polish market. Examples of such microcomputers are: the MERITUM 2 (for teaching purposes, equipped with diskette and the small D-100 printer); UNIFOLERIT 2086; SPECTRUM ZX; BBC MODEL D+; IMP-85; MK-45; IMP-86; MEVAX and the like. The MK-45 and IMP-85 (16-bit, and thus quite modern) include the CP/M operating system that can supervise Dbase 2 type data, which is of great interest to civil defense. These microcomputers use WORDSTAR, the wordprocessing program that can be used to generate and fill-in all kinds of forms, write letters and generate official

messages (this is very practical in quartermaster and supply work and in logistics).

The ELWRO Center for Computer Systems, Automation and Measuring Systems, our leading state enterprise for the production of computer equipment, is attempting to keep abreast. In addition to the medium computers of the Ryad family, ELWRO is proposing its own microcomputer designs. These proposals were presented in the form of prototypes at last year'systems Poznan Fair, including the ELWRO-600 and the ELWRO-700 SOLLM, for use in schools, mainly to teach computer science. The ELWRO-700 SOLLM is designed to be an educational microcomputer. Serial production of these computers for export and the domestic market will begin this year.

Using Small and Medium Computers in Civil Defense

In Poland, the designated level of applying computer science in the activities of various organizations and institutions having higher public utility has been achieved, including in the area of defense. However, the level of application is uneven. Computers have been installed in many branches of the national economy and even in the ministries, but often these installations were based not so much on need but for reasons of prestige and fashion.

Thus, the local computing power of these systems have increased relative to real local data processing needs. Thus, reserves are available. Civil defense should take advantage of this opportunity, developing the computing power reserves in stationary systems for the need of its information systems. Much has already been done in this area, but much still remains to be done. There is a general plan to develop computer science for civil defense needs that was approved in 1985 by the Territorial Defense Main Inspectorate Collegium. Multiyear and annual plans also have been developed. For example, the order of the Chief of Civil Defense Command regarding the realization of civil defense tasks in 1986 in the area of scientific research encompasses:

-- assuring operation of the OCENA, OCHRONA I HADR information systems; -- training SWS users in computer equipment.

In addition, the minister of health and social welfare approved the development by the Civil Defense National Center for Analyzing Contamination of microcomputer programs and, in cooperation with the National Civil Defense Inspectorate, the initiation of work on an overall SWC concept in civil defense.

The plans indicate that the civil defense information structure, in its functional and organizational aspects, will be based on a system of linked organs concerned with gathering, developing, maintaining, processing, transmitting and supplying data to interested parties to make decisions. This data will be supplied in areas, forms and times specified by users, in accordance with processing technology. Data processing systems that operate effectively will assure a successful information structure for civil defense organs.

It has been assumed that the organizational and functional structure of the civil defense computer system can be modified relative to:

--requirements resulting from changes in civil defense's structure and operating principles;

-progress in expanding the computer network or modernizing data processing

methods;

-- the development of computer science in Poland and the possibility of using it for civil defense needs.

The Possibility of Using Microcomputers In Civil Defense

Thanks to the construction and mass production of computers, conditions arose to reduce the weight, power consumption and size of computer systems. Progress is developing on a superuniversal higher-order programming language for all computer systems has been made. The goal of this activity is to eliminate most higher-level languages for a single one (including ADA).

During the past several years, the microcomputer has been transformed from a special device to a "consumer electronics" item on par with TV, HiFi or video equipment. One can venture to say that the above trends are creating the technical and market conditions to enable civil defense to satisfy its needs in this area.

Various microcomputer types are being investigated by the computer centers, inlouding:

-the MERITUM 2, a Polish microcomputer designed for teaching purposes. It is being introduced into military schools, and there is no reason why it could not be used by the Civil Defense National Cadre Training Center.

-the UNIPOLERIT 2086 with a system emulator. It can be used with ZX SPECTRUM+ software and a color TV receiver as a monitor. It can be used for teaching purposes in military academies (and thus adequate for the Civil Defense

Nationa Cadre Training Center);

—the BBC MODEL B+ (a product of the British firm Acorn that is sold in Poland by MERCOM, a Polonian firm). It is used in British schools, and thus can be used for the same purpose in Poland.

Recently it was learned that a new Polish 16-bit microcomputer has been developed, the COMPAN-16, based on the combination of two 8-bit computers. The Polish PC MERITUM-1 is comparable with the ZX SPECTRUM + (English) and the COMMODORE (FRG), but it is somewhat of a toy. Thus the possibility of using it professionally in civil defense is nil. There are many other machines that are becoming more available in Poland, for example, the IMP-85, IMP-86, MK-45, MEVAX and the like. Our IMP-86 is an IHM equivalent. Of course, IHM makes the best personal microcomputer in the West. This could provide an opportunity for our own modern hardware in our market, which presents an opportunity for civil defense. All of this must be verified in practice, which requires time and work.

11899 CSO: 2600/440 MILITARY

'SOCIALIST NATIONAL DEFENSE THEORY' CITED IN MYSL WOJSKOWA

Warsaw PRZEGLAD CERCNY CYWILNEJ in Polish No 1, Jan 87 p 48

[Article: "Selected Problems In the Theory of the Defense of a Socialist State"]

[Text] The above title is peovided in Prof Julian Kaczmarek's article published in MYSL WOJSKOWA, No 9, 1986. In it we read "Under present conditions, each socialist state, and thus Poland also, must pay special attention to its defense. It is an immediate need. Our Constitution expresses this problem formally. Article 6 states that the policies of the Polish People's Republic are guided by the interests of the Polish nation, its sovereignty, independence and security, by the desire for peace and cooperation among nations. This means that our country, like the other socialist states, in addition to many other functions, is also obligated to fulfill its defense function. This function is very broad and encompasses above all all measures to prevent war, multilateral preparations of the state organism to repel likely aggression or to counteract it if a conflict in the internal as well as external space cannot be avoided. In the external sphere, the defense function is defined in our Constitution (Article 33) as the defense of the country and in the internal sphere, as state security."

Prof Kaczmarek formulates the defense problem in four areas: nonscientific knowledge, and thus practical, intuitive knowledge; scientific knowledge (military sciences), military doctrines and practices. Also, in his opinion, in considering defense it is necessary to define the state in which the country may find itself in. In the modern world, considering the possibility of achieving political goals, we have to deal with three states, writes Prof Kaczmarek. They are peace, war and nuclear cataclysm, Concerning this precise requirement to maintain the country's security, the article provides answers to the question: What is the Polish People's Republic modern defense system and is it adequate in the present international situation?

11899 CSO: 2600/440

### INDUSTRIAL REQUIREMENTS. METHODS SET NEW MANAGERIAL AGENDA

East Berlin WIRTSCHAFTSWISSENSCHAFT in German Vol 35 No 2, Feb 87 pp 161-177

[Article appears under the title: "Theoretical and Practical Questions Related to the Further Improvement of Hanagement in Industrial Combines under Conditions of Full-Scale Intensification (Theses)." These theses were prepared by the Council on Economic Hanagement Policy under the direction of Prof Dr Gerd Friedrich for the session held on 28 October 1986 by the GDR Academy of Sciences' Economic Research Council and its Primary Industries Council on Economic Management.]

[Text] Departing from the orientation given by the 19th SED Congress to the industrial combines to establish the broadest basis for the development and application of key technologies, requirements and methods are identified to further improve management in the combines and their subsidiary plants.

First, fundamental processes are explained which result from the stormy development of the productive forces and which surkedly influence the entire cycle of intensively extended reproduction and direction indicated how management, organization, and business administration in the combines must cope with these processes. The resultant tasks are registered for the further development of the relatively closed reproduction cycle of combines, with particular emphasis being laid on science and technology, the in-house production of quality-determining supplies, the manufacture of new, high-value consumer durables, a more effective specialization of enterprises, technologies, and in-house production organization. In this connection, new demands are explained that arise with regard to the work of managerial staff, the style and organization of management.

Much attention is paid to the definition of the tasks which evolve above all from the full-scale economic utilization of modern information technologies and the rapid progress of automation and call for the attainment of higher standards in business management.

The theses are concluded with a generalization of experience gathered to date with the introduction of CAD/CAM technologies.

1. In the report of the Central Committee of the German Socialist Unity Party at the XIth SED Party Congress. Erich Honecker characterized the essence and content for the economic strategy of the party with a view to the year 2000.

The central there states that we must "combine the advantages of Socialism even more effectively with the accomplishments of the scientific-technical revolution, which itself has entered a new stage. Microelectronics, modern computer technology, and computer-aided design, project planning, and production control are becoming more and more important as determining factors for the productive capability of any demestic economy. In close interaction with these factors, other key technologies are expanding, such as flexible automatic manufacturing systems, new machining processes, and materials, bicengineering, nuclear energy, and laser technology." (1)

Erich Honecker made reference to the fact that decisions on the growth of labor productivity fall in this field, and we can't pick [our own] speed, given the increasingly rapid international development of productive forces. "This means winning our race with time, getting the jump on important points, and thus achieving high economic and social results." (2)

In this process of struggling for peak performance and the acceleration of scientific-technical programs in production, the combines and their enterprises are examing a key position. As underlined by the Party Congress, they form the backbone of our planned socialist economy. "It is essential that central state management and planning be combined more and more effectively with the creative activities of the workers and the independent activities of the combines, enterprises, cooperatives, and local government organizations."

(3)

At the Economics Conference of the GDN during the Karl Marx Year in 1983. Guenter Mittag stressed the fact that the responsibility for all decisive phases of the reproduction process in [specialized] areas of the domestic economy devolves to the combines. "They combine the Jecisive capacities in science and technology for the rationalization of their technologies and supply the material that determine quality in order to produce product in the most efficient manner, product, which according to the Plan, are necessary for the needs of the domestic economy, to provide the people with consumer goods, and for export." (4)

The development of the combines embodies the essential steps toward the perfection of socialist production conditions in order to provide more latitude for the dynamics of productive forces. Will the development of the productive force of the combines, which to a great extent includes the cycle of intensively expanded reproduction, decisive conditions exist for achieving the qualitatively novel tasks posed by the economic strategy of the party of the party

The basic measures decided upon for the achievement of the resolutions of the XIth SED Party Congress for the qualification of management, planning, and economic accounting specifically strengthen the economic responsibility of the combines and their enterprises for strensively expanded reproduction. Based on the Plan, they offer the combines and their enterprises essential new opportunities for opening up qualitative growth factors for increased productive development, coupled with decreasing costs.

The proven path is characterized by the conscilidation of democratic centrism as well as conscious development of apparentiation between the need in the

domestic economy for highly efficient economic management, the tasks of the combines and their enterprises, and the interests of the workers. These efforts are being continued in a goal-oriented way, with particular emphasis on the principle of in-house production of materials, providing for more efficient organization of the process of intensively expanded reproduction in the combines. Closely associated with these efforts, the urgent orientation of profit, cost, price, foreign exchange, credit, and interest effects the strengthening of the economic interest of the combines and their enterprises toward high quality, productivity, and efficiency to meet the prodouction needs [of the economy].

Comprehensive application of thorough computer-sided supply-and-demand balancing of saterials, equipment, and consumer goods raises to a qualitative-ly higher level the control of the growing interaction in the domestic encomy, coupled with simultaneous increases in the economic responsibility of the combines.

2. Revolutionary changes in science, technology, and production are making qualitatively novel demands of combine management. These demands affect the continued character of the relatively closed reproduction process in each combine and the level of socialistic factory management.

As Erich Honecker indicated at the XIth SED Party Congress, the productive forces associated with the key technologies are distinguished by a higher quality; these factors, combined with the complex automation of production using computer-aided production preparation, management, and planning. Swill lead over the course of the next 10 to 15 years in various stages to ever-increasing level of factory automation. (5) There is no doubt that this new quality in the p. sductive forces also requires a new quality in enterprise management and organization. Complex automation of production and computer-aided production preparation, management, and planning will lead to the closest possible linking of production, information, and management processes.

The introduction of modern information processing technology is proving itself to be a powerful lever for augmenting the productive force of scientific-technical potential and for accelerating the overall reproduction process. Finally, the efficiency of complex automation and computer-aided production preparation and management must be ensured throughout the entire level of socialist factory management and organization.

It is primarily the stormy development of productive forces that characterizes the planned continuation of the process of accialization of production and labor. In this regard, the essential influences on the development of the entire cycle of intensively expanded reproduction in the combines derives from the following processes:

by the competitive struggle in the world market and [has also become] a basic condition for satisfying growing demands in the domestic economy. This trend contributes additional impulses to shorten [production] cycles and accelerate the spread of scientific-technical innovations. Both domestic and foreign consumers are increasingly making high demands on functional characteristics

and product quality in the comprehensive sense of the word. Peak scientific-technical performance, as expressed in new products and technologies, constitute the decisive source for higher efficiency and productivity. This is also the primary channel for increased upgrading of the energy sources and raw materials used and for satisfying the needs of the people and the domestic economy, as well as doing a better job of meeting export requirements both quantitatively and qualitatively, with a more favorable cost/profit ratio.

- -- The acceleration of scientific-technical progress, in particular the cosplex application of key technologies, leads to growing production dynamics as well as increased economic interaction on the national and international scale. Control of the dynamics and the complexity of the renewal processes taking place in the combines in conjunction with long-term national and intermational scientific-technical and economic cooperation demands a great deal from combine a. gement. Each combine and enterprise bears a growing responsibility to the domestic economy and their current business partners for the quality and the scientific-technical level of their products, for the reliability of their scientific-technical and economic cooperation, and for reliability in meeting delivery deadlines. Under current conditions of rapid development in production forces, highly efficient international specialization and cooperation in production can only be achieved in association with the further development of products and production processes oriented toward the highest scientific-technical and economic parameters. Our combines and enterprises are developing direct relationships with partners in the USSR and other countries in the Council of Mutual Economic Aid within the framework of our domestic economic plans based on agreements and production contracts. It is precisely in this area that we are dealing with the kind of tasks that will allow us to achieve a peak international level in the shortest possible amount of time.
- -- Under the influence of scientific-technical progress and of limited resources, consumer needs are undergoing further strong differentiation. The number of specialized customer requirements is increasing. Among other things, this leads to a tangible decrease in the size of production runs accompanied by simultaneous expansion in the range of products in numerous branches of processing industries. Traditional models for enterprise specialization are based on the assumption that product selection will become increasingly narrowed, with growing piece numbers per product; these models aren't valid [under current conditions]. If an enterprise or country is going to be capable of competing internationally, it must be capable of supplying a wide assortment of products and of reacting promptly to special customer requirements; these are becoming the essential characteristics of an efficient, demand-oriented reproduction process.
- -- In light of flexible automation, the so-called law of mass production becomes purely relative. This law is based on the premise that high piece numbers of identical products are the primary means for minimizing production costs. Technologically speaking, this concept corresponds to rigidly automated assembly lines that are difficult or almost impossible to change over. Flexible automation makes it possible to obtain the same economic effect by minimizing set-up or change-over times for similar products, which means that this is a technological concept for expanding product range and cutting back on the size of production runs, while still maintaining economical cost

control. At the same time this produces new possibilities for combining mass production and individual parts production. Besides, flexible automation creates favorable conditions for introducing new product generations into production in aborter periods of time with a given fixed assets inventory.

-- Rapid renewal of the product range in mechanical engineering is leading to increased "moral depreciation" [loss in the value of older capital goods as a result of technical advances in new machine design] in existing fixed assets, particularly for machine tools. There are limitations on the extent to which this moral depreciation can be counteracted by replacing the means of production. It is proving to be more economical to replace controls, drives and/or workpiece conveyor equipment, and dies, and to take similar actions aimed essentially at bringing existing equipment up to current standards. The modernization of existing machines and equipment is becoming the primary form for the reproduction of fixed assets. These procedures change the responsibility of both the user and the manufacturer of the machines and equipment for the planned reproduction of fixed assets funds.

-- In many cases, computer-aided production planning and management has proven to be an important prerequisite for fully exhausting the economic possibilities of flexible production automation.

In particular, the development of CAD/CAM systems will increasingly become a prerequisite if we are to keep pace in the area of product innovation, specific customer requirements, and internationally revalent new product preparation developments. The economic effects of modern information processing techniques are primarily oriented in the direction of significantly increased labor productivity with regard: to information processing itself, considerable reduction of production planning (times) and of the production cycle, qualitative improvement in production documentation, better utilization of capacity, and decreased inventories using computer-aided production centrol.

3. The basic thought that has always governed the process of combine formation has been the combination of reproduction process within the domestic concept from the standpoint of the reproduction process within the domestic concept in order to ensure the closest connection between science, production, and sales. This concept gains current importance on qualitatively higher plane: in order to structure the combines as the broadest base for economically efficient development and application of the key technologies, for effective production renewal, and for rapid reaction to changing requirements, it is necessary to strengthen all the facets of each combine that are necessary for achieving these grains and to structure all phases of the reproduction process as effectively as possible. (1) With their scientific-technical apacities, they must increasingly achieve prex performance concerned to international standards.

For the scientific-technical areas of the combines this means:

-- They must build up transf-specific hair remark and continue to develop entertially sound coperative relationship with the institutions of the Acatemy of Intended and the university system in order to generate the kind of cientific leading edge necessary for revenutionary charges in product, process, and technological development, and to make this elmi of innovative hange practically effective;

- -- They must use computer-aided work stations in research and development, design, project planning, and technology in order to generate the kind of conditions that will considerably increase the efficiency of their scientific-technical potential;
- -- They must build up capacities for the comprehensive application of microelectronics and modern information technology in their own reproduction process:
- -- They must improve the proportionate relationship between research and development capacities and the capacity to transfer scientific-technical results to production in order to achieve the necessary high renewal rates and the corresponding shortening of the research and development-production-sales cycle.

In order to ensure intensively expanded reproduction based on key technologies, in-house production of supplies that are critical to quality is of principle importance. From 1981-1985 in the overall production of manufacturing equipment for the printing industry, it was possible to increase the percentage of machines with microelectronic equipment from 27 to 60%, and similar increases of 12 to 451 were achieved for textile machines. This being true, we can attribute these accomplishments primarily to the fact that the printing combine Polygraph and the textiles combine Textima created the essential prerequisites for this development in their own reproduction process by building up the enterprises Polygraph Electronics and Textima Electronics. In the last few years, combines like Forming Technology and Textima have allotted up to 40% of their investment assets to ensure the proportionate relationship between prefabrication and finished product manufacturing. Inese funds contributed to the direct preparation of material-technical conditions in the enterprises so that they could include product-specific material deliveries in their production program, and they contributed to the rationalization of final-product production. Based on the model of the Schwedter initiative, these efforts were aimed at gaining manpower for the development and manufacture of specific [previously] out-sourced products.

Analogous to the proportioning of the scientific-technical potential, the assumption and expansion of in-house production of quality-critical supplies is determined in the combines by the requirements of complex renewal processes and by the tempo of scientific-technical progress. These factors dictate that for maximum success, the development and production of final products and certain sub-assemblies and components should take place under one roof. In-house production of formerly out-sourced materials that are critical to quality control is a basic requirement if enterprises are going to be able to react rapidly to changing requirements.

in order to control the renewal processes, the quantitative—but above all the qualitative—development of the mean; of rationalization in the combines is becausing a pivotal point. Whether we are dealing with the development of flexitle automated manufacturing lines in order to modernize existing equipment, the necessary supplementation of existing fixed assets inventories in conjunction with the introduction of a new product generation into production, or special texts and measurement technologies, these efforts all require at the very least some involvement in the construction of the means for

rationalization. Each combine is confronted with the task of developing its own system for constructing the means of rationalization so that it can achieve the primary aspects related to both the modernization of their fixed assets and the introduction of new products. In many combines, in-house construction of the means of rationalization has become a docisive means of covering the investment costs for equipment needs. It is a decisive link in the chain for the materialization of many scientific-technical achievements. It provides important prerequisites for unified product and process development as part of fixed assets reproduction, and particularly with regard to the conditions of flexible automation, it provides an important link between traditional producers of capital goods and the individual consumer, the user of machines and equipment.

Thus the combines bear the responsibility for modernization and reconstruction in the form of quantitative, but primarily qualitative, growth in the construction of the means of rationalization. In conjunction with this function, the combines are developing financial funds for whose management and application they bear the full responsibility. Based on the Plan, the combines are independently responsible for applying these investment funds, which derive in part from amortization funds and in part from earned net profit, thus the extent of the funds is directly dependent on performance in fulfilling the Plan. Thus management of the funds for modernization and reconstruction, plus the growing opportunity to increase performance, are based on these factors. In this way--combined with an effective injection of credit, interest, and other measures -- the unity of material and financial planning is firally grounded in the area of fixed assets reproduction as well. The decisive, forward-looking turn of the combines and their enterprises toward modernization and reconstruction-using in-house construction of the means for rationalization and their own building capacity as their primary source of investment funds -- is thus strengthened not only by the specifications of the Plan, but also by economical accounting practices in the combines and enterprises.

The higher quality of scientific-technical labor and the application of key technologies must be tangibly manifested in the production of new, high-value technical-industrial consumer goods. In this regard, the XIth SED Party Congress made demands that equally affect both the traditional consumer goods combines and the combines that are primarily involved in the manufacture of capital goods: The entire domestic economy must increase its involvement in the production of consumer goods over a broad range to meet market needs, in high quality and sufficient piece numbers, but at lower costs. This is an important facet of the responsibility of the combines. Each combine must create and expand high-performance capacities to achieve these goals. Based on the highly economic results of science and technology and in conjunction with the changing needs of the people, 30 to 40% of the products in the consumer goods production should be renewed every year.

The dynamics of market demand, as well as the need to renew production and apply the key technologies, are leading numerous combines to look for new solutions in the area of specialized enterprises, technology, and production organization. It has been and continues to be necessary in these areas to create the preconditions for accelerating the renewal of the production assortment, for achieving significant shifts in product lines using existing

capacities and with minimal difficulty, for reacting more rapidly to specific customer requirements, and for introducing design and technological changes into production effectively and with short lead times. As a rule this requires the implementation of clear, logical relationships in the unity between product and process development and the investment of additional effort to assure the material-technical aspects of transfer processes (performance capacity of Sample Building, Testing, Engineering and Pilot-Project departments, as well as production equipment and the construction of the means for rationalization. Paths are being explored for introducing modular and strictly standardized product design in order to counteract the diminished size of production runs for finished products and the explosion of the parts range. This trend is aimed at creating the possibility for central manufacture of components and sub-assemblies. In no small number of cases, it is necessary to create the facilities in some cases for parallel manufacturing in several combine enterprises of certain parts in a product line. Efforts are being made to open up new ways for the organic connection of the mass production of standardized products and sub-assemblies coupled with detail parts production in accordance with special customer requirements.

The process associated with the development of modern productive forces for the continued socialization of production is taking place in the combines, primarily through the development of the material structure of the relatively closed reproduction process. The critical factor is the capability of each combine to innovate products and technologies within internationally prevalent deadlines, to react flexibly to changing demand and market structures, and in principle to improve the cost/earnings ratio.

- 4. High demands are placed on combine management that they assure that all personnel, material-technical, economic, and social conditions be met so that each combine will continue to come to terms with the standards for efficiency and performance set by the economic strategy of the party. The Directive of the XIth SED Party Congress for the Five Year Plan for the Development of the Domestic Economy of the GDR from 1986-1990 is oriented toward:
- -- Even more effective development of the possibilities inherent in the combines for comprehensive intensification over the long term through continued refinement of management, planning, and economic accounting:
- -- More effectively uniting the advantages of uniform central management in the combined potentials present in the combines with continued enhancement of the independent economic responsibility of the enterprises in the combine based on the Plan;
- -- Further development of democratic centrism in the combines in order to ensure a full range of democratic participation by the workers in the management, planning, and implementing of production in socialist competition in association with the solution of the complex economic tasks assigned by the Plan;
- -- The efficient mobilization their own performance reserves through complex comparison of performance, the qualification of economic analysis, and the application of proven methods of socialist factory management;

-- Concentration of management activity on the part of the combine general directors, particularly with respect to the organic link between science and production.

The dynamic development of productive forces requires high quality analytical conceptual work in the combines in order to prepare for and make far-reaching decisions, primarily for the development and introduction of key technologies, in order to formulate renewal processes with the appropriate targeting angle, and to structure and prepare collectives in a timely fashion for the development and introduction of new technologies and products. To the same degree, operational management faces the growing challenge to guarantee the fulfillment of the Plan, to increase production continuity, to fulfill production contracts with domestic and foreign customers without exception, to accelerate reproduction, and to cut order turn-around times. The only way to actually achieve the projected and planned economic effects and to lay the groundwork for increased output is by maintaining the unity of qualified, forward-thinking labor and logical operational process management.

Any enterprise must possess a fully capable management collective if it is going to be able to meet its domestic economic responsibility through the forced introduction of key technologies. Good results will be achieved in those areas where enterprise management promptly assumes unified positions on qualitatively novel tasks, new techniques and technology, and the necessary new factory and production organization associated with these factors. The enterprise director is personally responsible for seeing to it that managers guide the economic processes politically, act in a uniform manner, present problems and solutions openly and honestly, confer with the collective, introduce any necessary corrective measures promptly and carry them out logically. For their part, the managers must fully recognize their personal responsibility for the tasks that have been assigned to them. Particularly when dealing with complex projects, numerous tasks present themselves simultaneously; they must be clearly prioritized and addressed, and strict management, organization, accounting, and supervision are required in order to ensure their fulfillment. Lapses are unavoidable if the management hierarchy is overrun by a mentality preoccupied with budgetary tracks, attempts to "draw the line" between departments, and petty conflicts between management areas. Such factors can only impede cooperative interaction to achieve mutual, non-bureaucratic solutions to entrenched problems.

In order to come to terms with these new requirements, the enterprise itself can and must develop an appropriate management style and organization, both on the general management and the middle management levels. Success in achieving our economic strategy in the combines and enterprises will be determined by creative, dedicated, and disciplined action on the part of the workers and their collectives, through qualified management activity, and through further development of the leadership role of the working class party.

One of the principle concerns of party leadership activity is the central importance of human beings as the main productive force, and our primary task is to improve the satisfaction of human needs through logical implementation of policies. To these ends we must generate increased willingness to perform through the logical implementation of the performance principle, ensure that the workers are qualified to meet the high requirements people have to face,

and thus to open up renewed sources of growth for economic development. Erich Honecker has repeatedly made reference to the fact that precisely during the transition to broad application of the latest technology, management attention to people, their capabilities, interests and needs, and their thoughts and suggestions must be especially great. In this regard, the political responsibility of the manager is also expanding. His capability and operating style are to a great degree responsible for determining whether and to what extent the enterprise will be successful during the transitional process in combining social needs with the interests of the collective and of the individual worker and in leading the collective to higher performance. His professional competence and persuasive powers, his ability to motivate and stimulate the collective to high performance, and to organize a smooth work flow gain in importance, particularly under the conditions of dynamic economic development. The necessity for daily operational management of efforts to fulfill the Plan. plus the simultaneous need to prepare and implement long-term decisions, poses high demands on operational organization and the working methods of the manager.

Peak performance in science and technology, control of key technologies, isplementation of a high production renewal rate, and increased upgrading of the energy sources and raw materials used are associated with new requirements for the development and utilization of social working faculties and particularly of intellectual potential. Specifically in this context, Erich Honecker has noted that the responsibility for training new personnel is growing, particularly with respect to skilled workers and on-the-job training in the combines. (7) The introduction of new technologies, the further development of the product range in mechanical engineering, the development of microelectronics and its applications, as well as increased upgrading in the metallurgical and chemical industries, and the qualitative development of consumer goods production lead to new demands on labor and new job content, and to a growing degree require the acquisition of workers for new tasks. These factors are associated with essential changes in the working and living conditions of the workers. New attitudes toward work and new behaviors are becoming necessary because the quality of the products and the efficiency of production are increasingly dependent on both high scientific-technical performance and qualified, consciention: work in every job--from research to customer service. Comprehensive socialist rationalization makes high demands. In this area organic improvement of work cycles, modernization of existing technology, and renewal of the production process are combined with saving labor time, increasing labor quality, and improving labor conditions.

Based on this process, positive management experience gains particular importance for further training of management personnel, initial and on-the-job training of new personnel, and of personnel reserves. The primary concerns in this area include:

-- The working methods of the manager at the head of the economic unit (recognition of their increased responsibility, projecting and implementing ambitious goals, work with supervisory personnel and the collectives in the organization of daily plan fulfillment, and the implementation of complex renewal processes);

- -- Relations between the manager and the collective (structuring the collective within complex renewal processes, the example presented by the manager, development of a performance-oriented collective climate, growing responsibility for the utilization of technology and maintenance of technological discipline);
- -- Management tasks for the development and utilization of social working faculties (job-related qualification and job assignment, application of working faculties to take the best advantage of worker qualifications, acquisition of manpower for new tasks), and in particular the utilization of intellectual potential (conditions for labor and collective creativity, support for the renewal movement, organization of scientific-technical work);
- -- The effective utilization of the socialist principle of work performance (productive wages based on scientific labor organization and the assignment of characteristic performance ratings, object-related forms of variable stimulation, and other activities);
- -- The coordination of social organizations (trade union, Free German Youth, the Chamber of Technology) under the leadership of the party c. ganization for the solution of economic problems in the combines and combine enterprises;
- -- Content-related orientation and effective leadership of socialist competition, complex comparison of performance according to qualitative growth factors and the assurance of broad participation by the workers in the management and planning of the combines and their enterprises.
- 5. Three important aspects play a special role for the management, planning, and organization of labor during the entire project preparation phase of the reproduction process in a combine:
- a) One characteristic feature of current economic development is the rapid change taking place in the demand and marketing structures for many branches of industry, particularly under the influence of scientific and technical progress. In order to conform to these conditions in the international market as well as to meet domestic needs, it is absolutely necessary to ensure logical, demand-oriented management of the entire reproduction process in the combine. Exact leading-edge knowledge of the development of consumer needs, market and sales conditions, and the basic tendencies prevalent in scientific-technical development constitutes a prerequisite for setting well-grounded economic goals in research and development and for production planning in accordance with the market and [consumer] demand. Market research and scientific-technical prognostication must be combined in a decision-oriented information system for structuring the production program. Close, product-related interaction between scientific-technical potential and the sales area represents a decisive starting point for demand-oriented management of the reproduction process.

High renewal rates and a short-term transition to new product generations makes it necessary to conduct product development and market preparation parallel with and closely connected with one another over the entire

production planning period. Without timely application research, customer service, and sales argumentation, new products are thrust into an unprepared market, which has unfavorable effects on production start-up.

Consequently, in addition to performance specifications in the area of science and technology, a number of combines have started working out product-related sales concepts or "performance specifications for marketing activities." By coordinating the sales and research and development areas with regard to application and the development of roduct assortment, the conditions must be created to allow for the optimum anaptation of products to differentiated consumer requirements, thus arriving at an active supply position.

b) Each combine is faced with the task of doing the best possible job of organizing the entire process of production and the rapid utilization of now scientific-technical knowledge. The demands that evolve out of this situation reflect several levels of activity, including: the quality of scientific-technical prognostication, the development and confirmation of appropriate goals in scientific and technical performance specifications, and logical management of the collective doing the job in a way that supports initiative and creativity while at the same time fulfilling the job assignments and meeting deadlines. Ensuring short development and transitional lead-times requires a high degree of parallel effort in the individual areas involved in the scientifictechnical production planning process. Special management attention is required with regard to deadline-related material-technical assurance of the renewal processes -- including even the investments required -- and timely preparation of the production collective for the new technologies and products. The basic methodological, instrumental apparatus for the management and planning of scientific and technical [projects] has essentially come of age in the last few years, beginning with the regulations for the Plan for Science and Technology, as well as the work done with government production contracts, and including the renewal permit, performance specifications, and the formulation of agreements between combines and scientific-technical organizations and institutes.

Our main concern is centered on the processes that are structured with this instrumentation and the tasks that have to be solved, for instance, the processing of ambitious economic and scientific-technical goals, the motivation and stimulation of the collective to high creative performance in research and development, and the coordination of their activity. In the last few years task and process-oriented forms of organization and management have increasing proven their worth, making it possible to direct the responsibility of the collective and manager involved more strongly toward the final results of the renewal process in question, as well as to structure material stimulation dependent on the economic results.

c) The introduction of CAD/CAM solutions has assumed priority importance for the rapid introduction of scientific-technical knowledge into production and the radical reduction of lead-time for design and technological production planning, which can amount to 60% of the entire production cycle in the case of short-run production in mechanical engineering. Consequently advanced data processing users have been successful in reducing throughput times considerably in the production planning area. However, at the same time this has necessitated the restructuring of cooperation between design, technology, and

production based on computer-aided work stations. This process requires the implementation of a high degree of parallel effort between design, technology, and production management, and involves early introduction of those parts into production that determine the total throughput time of a product in the manufacturing process. With further acceleration of the reproduction process and the introduction of modern information technology in scientific-technical production planning, management faces tangibly increased demands to control the complexity of the renewal process and ensure the coordination of research and development and of scientific-technical production planning as a whole with all other areas of reproduction. Thus it is no accident that the stormy development of CAD/CAM technology has initiated a heated international discussion on the application of logistical principles in the structure of the overall flow of products, out-sourced parts, and materials. Reducing the time spent in project planning, design, and engineering, particularly as a result of CAD solutions, requires a reduction in the overall process in order to be actually able to realize shorter order and delivery turn-around times.

Demand-oriented management of the reproduction process is associated with close, product-related cooperation between sales and the research and developpent area; management of the scientific-technical potential for high economic results is connected with task and process-oriented forms of organization throughout and beyond all practic f production planning; and the effective introduction of modern information processing techniques involves the possibility of accessing all data relevant to a product or process beyond the limits of a given departmental area. In socialist factory management, all these factors contribute to the increasing importance of product and processoriented forms of organization and management in addition to or based on existing functional labor special ration among departments in the enterprise. Thus Guenter Mittag has emphasized the fact that it is considerably more effective to bring personnel from science ar. echnology, engineering, production, sales, and customer service directl, together in order to process a job order in the shortest possible time instead of letting it work its way through all the various departments. We must make increased efforts to organize our work with a product-related orientation, based on the existing management org risation and with full recognition of personal responsibility. (8) (A mrginal note in this repard: one of the revolutionary effects of modern information processing techniques on the existing factory managem is system is precisely the fact that the rapid availability of product and process-related data regardless of the department where they originated neutralizes rigid labor specialization among the individual functional plant management areas. Integrated solutions through data processing make it possible to schedule product-based coordination of timing cycles much more exactly, and to de . . . mine, achedule, and control production, sales, and materials management . ... precisely.

In the area of scientific management, the importance of snalyses and the generalization of practical experience is growing with reference to:

- -- Forms and method: for logical, demand-oriented management of the entire reproduction process in the combines;
- -- Management determination of economic goals for renewal processes;

- -- Ways to refine the cooperative interaction of science and technology within the combine and beyond the limits of the combine;
- -- Management methods and forms of organization that support the control of complex renewal processes and reduce transition periods;
- -- Refinement of instruments and methods for socialist factory management, above all cost work-ups. in-house management accounting, and factory analysis for even more effectively applying the principle of in-house production of the means for efficient structuring of the intensively expanded reproduction process.
- 6. Easential reserves for increasing efficiency and accelerating the reproduction process are available in the areas of production organization, ecoperation, and materials acquisition. This process must be studied in more depth, because specifically with regard to the economic need to reduce order turnaround time, it is apparent that numerous enterprises have not yet devoted the necessary attention the problem, especially in the areas of engineering and production management. Frequently reaction time in the cooperative relationships between suppliers and consumers is not fast enough when demand conditions change, and the possibilities for efficient cooperation between the manufacturer and the end-user are not generally satisfactorily exhausted. However, manufacturers and suppliers are not the only ones whose negligence prevents additional economizing in the reproduction process: inadequate coordination between sales, production, and material planning on the part of customers frequently lead to avoidable arcess inventories of supplies and materials that are urgently needed in the domestic economy.

In order to achieve flexibility in production and sales and the necessary reduction in order turn-around times, we must systematically employ analyses and model calculations to determine the corrective measures for rationalizing production and perfecting organization in order to allow for improved proportionate relationships. Increased production cortinuity, and accelerated production throughput. In particular, we must do a better job structuring material flow and alleviate unplanned downtime. Some of these solutions can take place at the combine level: expansion of centralized production. capacities for product-specific deliveries, central inventory mintenance of special materials and replacement part items, prefabrication of sub-assemblies and detail parts to form a materials management reserve for speedy execution of rush orders. Other efforts can be handled on the compine enterprise level: rationalization of prefabrication stages, clear definition of objectives for plant maintenance, adaptation of shipping procedures and the overall transport. handling, and warehousing process to changed production and sales conditions. Controlling qualitative changes in the product program, engineering, and the production sequence requires increasingly complex organizational solutions to ensure the continuous flow of parts and sub-asset, lies under new conditions, to improve the proportionate relationship between prefabrication and assembly, and to support improved control of machine scheduling, throughput planning, well-balanced capacity utilization, material readiness, production equipment, and the organization of inventory management and other support processes. Without a doubt, the key to this problem lies in computer-aided production

planning and control and flexible automation, which can lead to extensive integration of primary and support processes in the individual manufacturing areas. Dealing with existing related organizational tasks and establishing the conditions [required to solve these problems] is definitely a unique assignment that goes considerably beyond the direct introduction of modern information technology. This is all the more evident because the eff. tiveness of a whole series of CAD/CAH solutions will be immediately negated in the entire process—from materials management to sales—is not oriented toward shortening the cycle.

Production flexibility and acceleration of the reproduction process entails fine-tuned. seamless cooperation between finished product assurfacturers and suppliers, beginning with research and development on through production to sales. Efforts for improved utilization of the possibilities offered in this area by socialist production conditions must concentrate primarily on:

- -- Heavier utilization of proven forms of cooperation throughout the entire production planning phase. The goal is to reduce start-up lead times through mutual efforts in order to create the conditions for well-planned production start-up of high-quality products and to ensure rapid achievement of peak production;
- -- Coordination of procedures for determining demand and production planning. These efforts will provide for the essential conditions needed to reduce order turn-around times through stable decisions on production assortment;
- -- Improved exchange of information between final project manufacturers and suppliers in order to facilitate prompt reaction throughout the entire co-operating chain in the event of changing demand and marketing situations;
- -- Mutual economizing in the areas of inventory management and shipping as an essential precondition for accelerating the reproduction process and targeted expansion of systems for implementing production-controlled material deliveries.

Implementing production continuity and flexibility under conditions involving rapid product turnover, decreased lot sizes, and significantly rejured order turn-around times makes new demands on materials and inventory management. primarily with regard to inventory dynamics and structure. This involves the relationship between material supplies, unfinished products, and finished products in the enterprises, as well as economically efficient inventory in ragement on the part of suppliers, the capital goods trade, and consumer In order to improve inventory percentages on the domestic economy scale, we are striving to increase supplies in supplier enterprises and in the capital goods trade at the cost of supplies with the consumers, while at the same time decreasing overall inventory. In order to implement this process, we need increased quality in the uniformity between the plan. the materials balance, and the production contract. Refining the organization of the factory manufacturing process as well as sales and supply relationships requires that we pay increased attention to the kinds of questions that are closely related to accelerating the entire reproduction process in the combine. We must observe:

- -- The occupant of related to the development of modern productive forces.

  particularly resulting from the introduction of information technology and
  flexible outcomits for the uniter organization system and the operative

  Bunagement into a trail of production;
- -- Proven management methods for assuring production continuity;
- -- Ways and method: for improving cooperative interaction between finished product manufactures and manufacture;
- -- Refinement of the paterial balance fineluding setting up computer-aided materials manuscript of the station, ensuring uniformity between the Flanche materials talled and the production contrast at the level of the contine and the enterior.

There is so question that the efficiency standards for the second half of the following regard to the horizontal and vertical conditions of the regard to the horizontal and vertical conditions of the regard to the horizontal and vertical conditions. If the treatment of the following within and between the contines. Inspiration of a state of the following training and the rapid expansion of spateons for productive continuous material believery. Orowing weight will be experted a state of the following training and territorial rational-institute—on by on the burning of Instituted trainings and combines. Important reserves are available in the areas, not in the least for the rapid expansion of the following of the following and in the following states are in the latter attributes and in the following conditions.

A particularly weight of a particular the utilization of new possibilities officed by main information to trainer to introduce computer-added balancing in the article and information of interest and interest and provide for improved only of the model of the interest attendance in the domestic economy as well as more for the interest of the entire planning process for the domestic economy. It will be not possible to qualify decisions on the supply formal to the interest of the domestic economy and to that more effectively. The particle is the domestic economy and to that more effectively.

To be purious in the state printing for efficiency through the introduction of information sections, as the continue and the enterprises. This involves a factor of the state of which all the work within the conditions of the state of the state of which all the work within and sales—will be in the formed to achieve maximum labor productivity and another in the state of the state of the next few years at added the problem. The state of the state of the next few years at added in the problem. The state of the state of the state of the combines will play a great role in the state. The state of the state of interested in simply 'grafting' CALICAN testimates to exist, "see are not interested in simply 'grafting' combines and enterprises, but rather in using it as a catalyst to achieve basic change in the entire operating procedures of the combines and enterprises and to attain basic acceleration of the process of intensively expanded reproduction in its decisive phases. Hence in principle we need an economically grounded approach to the introduction and utilization of CAD/CAM technology." (9) As Guenter Mittag has explained further, we have to increase the productive force of human labor considerably in order to come to terms with the law of the economy of time and to shorten the production cycle, to decrease material costs, to produce higher newly created value per working hour and per unit of raw material and energy, and finally to heighten the intensively expanded reproduction of the domestic economy of the GDR on a new material-technical basis. (10)

Available experience indicates that the effectiveness of the CAD/CAM solutions we want to introduce is in a great degree dependent on our sucress in:

- -- Carrying out the selection and introduction of information and computer technology according to a well-thought-out total concept integrated into the strategic development concept of the combine (upgrading concept) in order to ensure critical efficiency-related performance and management process, the ability to integrate isolated solutions, and the compatibility of technology and software;
- organizing the systematic upgrading of personnel qualifications, timely communication of knowledge and skills, and particularly jet-related introduction of technology;
- -- Ensuring the development of the necessary poftware cupacity in the commines, coupled with cooperation in creating software and maximum follow-up utilization of existing poftware solutions;
- -- Combining computer-sided solutions in production planning and production control with flexible automation in production;
- -- Creating all the rganizational preconditions for efficient utilization of information technology.

There is no doubt that the main impulses for organizational refinement and raising the level of factory management in the combines emanutes from the introduction of modern information and computer technology, combined with corresponding new demands on management and planning. Important organizational appears include the following areas; the implementation of some of them is associated with considerable expenditure of labor:

- -- Jot-related introduction of information technology leads to changes in later specialization and traditional operating cycles at the direct user level. We must take these factors into account by organizing the work involved, clearly assigning responsibility, redefining job content, etc.
- -- Automated information processing places significantly higher demands on data reliability, data maintenance, and the creation of data banks.
- -- The multivalent utilization of noft are, indeed, of existing user solutions, is predicated on extensive unification of the primary organization.

- -- Incrough solutions involving automated information processing require organizational solutions that are compatible with automation in all affected areas. Interfaces, access to data, and their multivalent utilization must be exactly sefuned.
- -- The development of integrated systems provides new possibilities for expending the specialized area-related organization through product and process-related forms of management and organization, which must be logically pursued in the interest of accelerating the reproduction process.

Multifaceted procedures for increasing the level of factory management (for instance with regard to make and musply processes, management, planning, and organization) are becoming essential in order prevent the time savings and even the savings as level through the autoFitton of subordimate information processing procedures for a telegraph of the last the savings are for other processes.

Finally, the introduction of matern information technology must also contribute to making high quality extrant decisions in the abortest possible time.

### 18000

- (1) Thepart for the Central Countities of the Sermon Scipialist Unity Party at the Eith SeD Party Congress, free other; m. moreover, Dietz Publishing, Berlin, 1981, p. 40.
- 17/ 1835.
- 141 "The Economic Stratory of the Party -- Clear Concept for Further Crests."
  Clear Familiating, During 1881, 2 8.
- (1) Thepart for the Dentral Constitution and up out, p 28.
- (f) The relationship between rapid non-spont of productive forces and continued development of the relatively stood reproduction process in the continue and the party or animal continue and the party or animal of the Central Committee in all the central of the EC Central Committee. See in this regard: "Preparing for the ELLS Farty Congress with Mich reformance." Dietz Publishing Berlin 1985, p 17 ff; "Qualitatively New Steps toward by responsance." Dietz Publishing, Lerlin 1986, p 57 ff.
- [7] New "Report for the Control Commuttee ... " by mit. p 46.
- (6) Se "Frequeing for the Alta Forty Congress with High Performance." Dietz Fublishing Berlin 1981, p 71 f.
- [9] G. Mittag: "Gualitativel) Sew Steps toward High Performance: Dietz Publishing. Berlin 1986, p. 64.
- (1) continue parts.

DIVI DESCRIP

# PAGE 15T OF ARTER ECONOMIC PERSONANCE RESISCIS SEVERE WINTER

Munich SCEDDELTSCHE ZEITUNG in German 7 Apr 87 n 25

inet! Fast Berlin-This past severe winter, not surprisingly, has adversely affected the CDR economy as well. According to statistical data which has now been released, for the first quarter of 1987, mone of the most important economic targets for this year's economic plus have been julfilled. All the same, as the afficial press release stated, "thanks to the greater effort on the part of the worters" a "further productivity increase was achieved." So in March there was a percent increase in the produced national income, which in Western terms is facility quivalent to the gross national product. Of course, for the entire leaf 5.7 is envisioned. Industrial production increases 4 percent-4.6 percent in all massed.

There official statements regarding the two figures for national income and inincitring production admittedly do not an enote, since they concern—and this is
a depicture from the DB Diffice for Editatics' usual practice for quarterly
tentials—this time only the ments of March. The reason for this limitation
is not alear. On the other hand, the figures for net production, labor productivity, and prime cost reduction for the economic everall, as well as for the
individual branches are given for all time ments together. So, in the first
carter, net production grew by 6.7 percent terminal plant 9.0 percent), labor
induction were decreased by 1.5 percent (minus 1.1 percent).

The net production for the coal and energy sector, as a result, increased by a mate 2.3 percent, while the Labor productivity increased by only I percent; there was even an increase in prime coats of 0.5 percent, Net production for the chemicals industry climbed by a total of 3 percent, labor productivity increased by 2.9 percent; the prime results even alimbed as high as 1.5 percent. With this, the coal and energy sector alone with the chemicals industry showed the poerest performance among the Obl's a country sectors. However, in the other modia there was assurance that delivery of coarse and condustibles had been matanteed for both the economy and for the populate. This was made possible, moreover, thanks to the "support of halfers from the armed forces"; the mostbly quetas had supposedly been ever-fulfilled.

On the other side, the GDR statistics for the electro-technology/electronics sector reported a 12.9 percent increase in net production, while labor productivity increased by 13.7 percent and prime costs decreased by 3.6 percent. With this, the electro-technology/electronics sector is at the top of the success ladder. On the consumer side, the volume of retail trade increased by 3.9 percent and net workers' income showed a 3.5 percent increase. This just barely meets the planned annual rate. Figures for foreign trade are not contained in the GDR's quarterly statistics.

/8309

CSO: 2300/281

ECONOMIC

ZAGREB PAPER CALLS FOR CHANGES IN FOREIGN EXCHANGE SYSTEM

Zagreb VJESNIK (SEDAM DANA supplement) in Serbo-Croatian 4 Apr 87 p 7

[Article by Zvonko Gajski: "Exporting Ambitions in Danger"]

[Text] The prize question for the federal government is this: What more must happen for people to realize that the exporting ambitions for this year cannot be realized with the present foreign exchange system and measures of economic policy? Or, put more accurately, why postpone facing the fact that under the present business conditions the export economy cannot maintain even last year's (poor) export results, much less achieve the 4.5-percent growth rate of exports envisaged by the Resolution? The justification for addressing the question where we have indicated lies in the obligation assumed (toward the end of last year) by the FEC to analyze the impact of the measures embodying the system and the measures of economic policy on the export trends in the 1st quarter and also in the statement made by the chairman of the federal government that everything that has not confirmed itself in practice will be changed.

The indicators on the trend of export toward the end of January and February have issued a warning that there are many things that should have been changed even yesterday. Nor are the most recent figures on foreign economic relations a bit more cheerful: from 1 January to 23 March total Yugoslav exports amounted to \$1,849 million, which is 12.7 percent less than in the same period of last year.

Many people say that the export minus would have been still more alarming if a new statistical method had not been introduced in computing the value of exports. Another disturbing datum concerns the simultaneous drop of 19 percent in Yugoslav imports, and the largest drop was seen in imports of raw materials and production supplies—for the production of exports.

Foreign Exchange Illiquidity

The car on the incline has not been stopped, nor have corrections been made in the meantime in the measures of economic policy: the more rapid slide of the dinar, higher priority for active exporters in making foreign payments, stricter oversight of the foreign exchange market. These changes, as exporters see it, just like the changes in the Foreign Exchange Law made

toward the end of last year, do not alter the essence of the foreign exchange system. To the greatest degree it still remains a system of administrative distribution of the right to import and make payment abroad, while at the same time there is no economic coercion to export and no motivation for better exporting results based on income.

The causes of last year's stagnation of exports, which occurred in spite of the important measures of the FEC to stimulate production for export and in spite of the favorable external conditions (the low price of petroleum, the drop in the value of the dollar, lower interest rates, a 3.5-percent growth of world trade) are seen in the unsuitability of the foreign exchange system for the more difficult economic conditions in the country, especially in the context of the high rate of inflation. Instead of increased exports, large disturbances are occurring in the functioning of the foreign exchange market, and foreign exchange illiquidity is occurring, which is becoming still more aggravated at the beginning of this business year.

Thus basic banks in SR Croatia, for example, entered 1987 with unmet obligations to the National Bank amounting to \$57 million, with more than \$70 million of payment orders which have not been executed, with applications for new lines of credit in the amount of \$255 million, and with a short-term credit debt that has not yet been recorded. This kind of universal foreign exchange illiquidity in which the settlement of foreign debts is postponed for several months is actually a time bomb in the republic's export plans. The fact that from 1 January to 23 March of this year SR Croatia had a more favorable export-import balance than the national average (the drop in exports was only 5.7 percent) is only an appearance made possible because ship deliveries were twice as great as in the 1st quarter of last year. Since a schedule for delivery of ships up to the end of the year will not surpass last year's deliveries or will be still less, the coming months may show the real face of the present difficulties in foreign economic relations.

### Motivation Based on Income

Because of their inability to promptly meet their obligations abroad, which is causing a shortage of raw materials for production and even the seizure of vessels in foreign ports, exporters are addressing ever harsher criticism toward the foreign exchange system and the measures of economic policy, demanding radical changes instead of the present patchwork. After all, there is less and less motivation to export, and the position of the export economy is getting worse and worse. The criticism is being addressed above all to the failure of exchange-rate policy to keep up-to-date. From the end of June 1986 to the end of January 1987 alone the competitiveness of exports dropped off 3 percent because of the unrealistic exchange rate against the "market basket of currencies and about 14 percent against the American dollar. In addition, import charges were increased 3.5 percent at the beginning of the year, interest on the credit financing of exports was raised 3 percent, and the period for payment of export incentives was extended. These are all reasons why exporters judge that this year, if present economic conditions persist, the motivation to export based on income will drop off about 10 percent.

Some of the proclaimed goals of the foreign exchange system are being achieved slowly or not at all. For example, we still have multiple exchange rates used in the unlawful sale of rights to import, but now the material benefits of such sales no longer go to the exporters (as was the case with the earlier pegging), but to those who acquire that right through more or less administrative allocation. That is, the system is based on the principle that all the rights to pay for imports which have been acquired must be discharged on the joint foreign exchange market, which is unfeasible because of the foreign exchange illiquidity, so that in 1986, for example, SR Croatia exercised only 63 percent of its rights in that manner.

As a matter of fact, a majority of the objections and criticism which is to be heard at the increasingly frequent meetings of exporters arise out of the assertion that the present foreign exchange system was made for stable economic conditions in which the present commitment to income as the sole criterion for involvement in exporting would be able to function. However, because of the large payments to be made on foreign credit, the necessary importation of raw materials and equipment, and the high rate of inflation on the domestic market, it is clear that income-oriented criteria alone, when they are based on export incentives (and they are limited by material capabilities) are not a sufficient motive for greater exporting efforts. How difficult it is to achieve motivation for exports based on income can be seen from the figures of the Bureau for Market Research, which show that toward the end of 1986 exporters realized a 28.6-percent lower price for the same goods on the convertible market than on the domestic market, while on the bilateral payments market the price was 5.6 percent lower.

It is obvious that the reasons for dissatisfaction with the present method of regulating foreign economic relations do exist, and the discouraging picture of import-export trends at the beginning of the year confirms that they are warranted.

There are also numerous reasons which indicate that this picture should be changed as soon as possible. First of all, augmented exports are needed so as to provide the material basis for the country's up-to-date technological development and its more equal participation in the international division of labor. A larger inflow of foreign exchange is also indispensable to repay foreign credit, to import raw materials and goods, especially imported consumer goods, which are one of the elements in the fight against domestic inflation.

Of course, it is clear to everyone at this point that because of the unfavorable production structure, the low productivity, the immense losses, the difficulties with the balance of payments, and the country's high level of debt it is not possible to establish the kind of foreign exchange system in which all the necessary foreign exchange would be obtained on the joint foreign exchange market, on which the exchange rate would be formed on the basis of supply and demand for foreign exchange and the ultimate goal of dinar convertibility would be guaranteed. However, recent discussions of the present difficulties in foreign economic relations in SR Croatia have crystallized out several proposals for changing the foreign exchange system as a transition to the period when augmented exports will contribute to

stabilizing the domestic economy, to reducing inflation, and to narrowing the gap between domestic and foreign prices.

More Suitable Situations

This applies above all to the demand for establishment of a mechanism of foreign exchange motivation in which the opportunity to import and to borrow abroad would depend directly on one's own results in exporting. Then there are the demands for pooling labor and capital in joint production for export, for separating the system of rights to pay for imports from the system of protection of domestic production through the commodity regimes, for a more realistic policy governing the exchange rate of the dinar or for the free setting of the exchange rate of the dinar in the restricted segment of the foreign exchange market, and finally the demand for the system to support higher forms of economic cooperation with foreign countries.

These quite radical changes in the foreign exchange system, it is seen, would be more appropriate to the present economic conditions in the country. These changes in the system would clearly signify an element of economic coercion for exports (since exports become a condition of production), but they also mean an element of foreign exchange motivation, one which increases with the growth of export results. At the same time such a system would not require the present extremely large siphoning of resources to create the incomeoriented motivation to export. It is true that some of these proposals, especially the one about linking the particular import transaction to a particular export transaction, could have adverse effects, but the consequences of that would certainly be less than the present discouraging results in the country's exports. We should recall in this connection the program for normalizing the country's external liquidity up to 1990, which plans a reduction in the level of indebtedness with foreign loans from 40 percent in 1986 to 25 percent in 1990. Since exports did not grow last year, a growth of about 20 percent has to be accomplished in the next 4 years. But that goal can be achieved only with radical changes in foreign economic relations. Or by reconciling ourselves to the fact that we are leaving this obligation to certain other generations.

7045

CSO: 2800/188

ECONOMIC

## CONSEQUENCES OF RURAL DEPOPULATION EXAMINED

Belgrade NEDELJNE INFORMATIVNE NOVINE in Serbo-Croatian 5 Apr 87 pp 21-23

[Article by Branko Colanovic: "The Economy: Time Does Not Wait for a Crisis"]

[Text] The bad fate of the Resolution for 1987 is now being lamented everywhere. The real truth is being revealed to us everywhere in the more frequent meetings, analyses, interviews, and "round-table discussions." Economic policy is more than vigorous. It acknowledges with a clear conscience that it was surprised by the unfavorable nature of socioeconomic trends and has been resorting to increasingly numerous and increasingly countless new measures. But it is taking its therapy and medicines from utterly different schools of medical thought as though it wishes especially to show that Seneca was not right in asserting that "there is nothing more contrary to recovery than a frequent change of remedies."

There is no point in saying that all of this will be unable to pull us out of the crisis. Just as in the case of medicine, the gods turned the daughter of the Greek centaur Chiron, a wise man and physician, into a mare precisely because she dared to predict the future for both him and Aesculapius, the god of medicine. Nevertheless, one must speak about the ultimate causes of all our difficulties and of the essential preconditions for overcoming them.

I think that we must speak primarily about expanded reproduction under the dictate of the explosive transfer of population from agriculture into nonfarm activities. In the history of other countries it has not often occurred with that intensity.

In the black-and-white representations of the economic results we have for several years found the stagnation of production, feeble exports, high rate of inflation, etc., on the bad side, and mainly the rise of employment on the good side. However, the positive side of this balance is acceptable only under certain conditions, i.e., if we look at it primarily from the standpoint of social welfare policy. To look at the rise of employment in the socialized sector without also looking at the output of the economy in terms of the growth of the social product, the rise of productivity, and the growth of accumulation is understandable only when employment is taken as a category in

and of itself, an end in and of itself, with no correlation or function in economic growth as a whole.

### Our Peasant Exodus

Probably the mistaken understanding of the relationship between rural affairs—agriculture—and creation of jobs is one of the greatest weaknesses of development policy and current economic policy. Numerous economic mechanisms, arrangements, and measures have been consciously or unconsciously aimed at forceable creation of new jobs in the socialized sector and in actuality toward a continuous large—scale transfer of manpower from rural areas into the cities. A fetish has been made of establishing employment in the socialized sector, although the land has remained in the private sector.

We might think back to the postwar arguments given for the Yugoslav position, which was opposite to the Soviet model of collectivized agriculture, that is, of complete nationalization of the land. We correctly saw that by contrast with the Russian peasant, who had no land, the Yugoslav peasant had been "territorialized" on his land since ancient times, however small his holding might be. Nationalization of the land was rejected, but unfortunately Yugoslav development policy was not built consistently on this fundamental commitment.

The scale and intensity of the Yugoslav rural exodus are truly exciting. Just between 1972 and 1986 the net transfer from agriculture to nonfarm activities amounted to about 4.2 million persons, an entire small nation.

The share of the farm population in the total population, according to the censuses, has been as follows (in percentage):

1948	1953	1961	1971	1981
67.2	60.9	49.6	38.2	19.9

It is strange that the combination of economic policy and social welfare policy allosed the abandonment of agriculture to proceed with particular speed in the period between the last two population censuses (1971-1981), when the economic crisis had already begun, and then in the period 1982-1986, when the crisis was full-blown, the share of the farm population in the total population fell to only 15 percent (estimate).

There is another light, one that is particularly bad, that also falls on this picture, however. The age-specific composition of the farm population is now quite unfavorable. According to the 1981 Census, only half of the farm labor force is between age 15 and 49, while the other half is age 50 or older. Even then Yugoslavia's rural population was old, and we can assume that over the 5 years that have passed up until 1986 it became appreciably older still.

# Two Opposite Forces

Two forces are operating with exceptional strength in the same direction in determining the strength of the transfer from agriculture.

The first is one which acts to repel from rural areas and agriculture, and it arises because of their position. We have added to the antonomasian "rural misery" unfavorable price scissors, the low efficiency or even absence of a purchasing network for a majority of farm products, shortcomings in insurance for private farmers, in their credit financing, and so on. We should add to this the marked shortcomings of entertainment, athletics, and sociopolitical life in rural areas.

The other force is acting upon rural people as a giant magnet in the direction of any sort of employment in the socialized sector. As a matter of fact, employment in the socialized sector is a fetish even according to the etymological root meaning of the word, which comes from the Portuguese feitico, which does not refer to the deity himself, but to his seat, the place which he inhabits, which has magical power. There are at least three things here. First of all, working hours. The actual obligation to make use of that time is loose and appears to be getting looser and looser. This is evident from the trend in hours of labor effectively worked, whose number in 1968 was 157 hours a month per worker in the socialized sector as a whole, and then in 1983 it fell to only 144 hours, and in industry all the way to 139 hours: an ideal situation for the profile of the person who is half a worker and half a peasant.

Second, personal income is assured virtually without regard to the productivity of labor achieved in view of the well-known and very widespread phenomenon of "socialization" of losses, the compliant rescue of collectives which are not performing well, the dismissal of their unmet obligations; and there are other financial advantages in addition to this such as the hefty hot meal, the discount for vacation travel, inexpensive vacationing in a worker resort, the family supplement, health insurance and old-age and disability insurance. Third, there has been the certainty of obtaining socially owned housing in the foreseeable future without payment.

And there have also been many very important consequences which have come and are continuing to come from the process of very rapid transfer of population from rural areas. We will dwell only on some of the more important ones.

First there is the influence on the size of agricultural output itself. Since back in 1953 the statistical service has recorded that the private sector owned 85 percent of Yugoslavia's cropland, but its total output, i.e., the size of its production, has shown a markedly downward trend with respect to its growth rate. It is difficult not to think, then, that the decline in the growth rate of production is a direct consequence of the immense outflow of farmers, especially in the years between the two last population censuses and since that time. The obvious efforts of the private sector to modernize itself have been able to only mitigate the decline in production which has occurred thereby. In 1985, for example, it possessed 785,000 tractors more than in 1971 (a more than ninefold growth).

The people who have left agriculture have been in various activities, both economic and noneconomic. Unfortunately, viewed in terms of the total numerical representation, they have been unable to contribute much there,

especially since the 1981 Population Census. It is precisely since 1981 that the country's social product has clearly been stagmant, new manpower has been added during the strong economic crisis; over the last 6 years we have added about 880,000 new employees in the socialized sector, but when we look at the overall picture, they have not been much needed. In 1986 average labor productivity per employee in the socialized sector of the economy was 8-10 percent lower than in 1980.

The Price of the Explosive Urbanization

The transfer of population from agriculture seems to have taken the shape of an independent process detached and separate from economic conditions. At the outset of 1986 employment security offices had 1,064,000 persons on their rolls, including 759,000 persons seeking employment for the first time, and 459,000 were unskilled. It is a notorious fact, however, that there is immense untapped potential for labor productivity in the Yugoslav economy and has been for a long time. The poor growth of agricultural output in recent years has been adversely affecting the Yugoslav balance of payments. Exports of farm products fell from 66.9 billion dinars in 1980 to 60.4 billion in 1985. But this is only a part of the problem, the smaller part. The steady and disproportionate adding of new manpower, accompanied by the decline in business efficiency, determines in advance that the economy will be uncompetitive when it comes to exporting. This is really where the battle for exports is being lost. The continuous devaluation of the dinar and the growth of export subsidies have been producing only ephemeral stimuli for exports, and now not even that.

If we talk about investments, there are only a few things we will emphasize. First, the stagnation and even decline of investments on private farms. In permanent prices they were smaller in 1984 than 7 or 8 years before that. The private farmers, whose numbers are greatly reduced and who are now elderly, seem to have become discouraged about making new investments. Second, the explosive urbanization constantly demands new investments over a short period of time in housing, municipal services, and educational institutions, although numerous houses and schools remain empty in the half-deserted country villages. After Greece, Yugoslavia is building more housing units than any country in Europe if the number of new housing units built is compared to the social product (the figures cannot be calculated for the socialist countries). In the European countries as a whole there is at least about \$1.5 million of social product for every new housing unit built, in Belgium, Denmark, West Germany, Sweden, and Great Britain more than \$2 million, in Italy more than \$3 million, and in Switzerland more than \$8 million. Greece and Yugoslavia have been building housing with only \$300,000-400,000 of social product per unit (all these figures are for 1981 and 1982). This is too great a burden on the ever smaller accumulation of the economy and the country's stagnant social product. It leaves too little room for other purposes, primarily for investments in scientific research activities.

The Movement of the Peasants and Inflation

Third, the disproportionately large new employment suggests extensive development in and of itself. In the 1st half of the seventies gross

investments in the fixed capital of the economy amounted to 21-23 million dinars a year per worker, in the 2d half they jumped to 24-27 million dinars a year thanks to the immoderate use of foreign loans. Finally, when the country's debt passed the critical point, those investments began to fall off sharply and in 1984 amounted to only 15.8 million dinars per person employed (all the amounts are given in 1972 prices). Under such circumstances it is difficult to talk about an orientation toward intensive economic activity and about investment in the most modern equipment and in R&D.

Finally, among the largest consequences of the very rapid transfer of population there is its impact on inflation. The stagnation of agricultural production (not to mention its decline) means curtailment on the supply side; the growth of the urban population has been too rapid, and added to the ever greater number of foreign tourists, this has meant a disproportionate and unsupportable increase on the demand side (food, housing, durable consumer goods, services). Given our understandable ambition to raise the standard of living, the commodity-money disequilibrium has been striking deep roots, all the balances are breaking asunder, physical, financial, and foreign exchange, all the down the line.

In the end, if we ask ourselves how long we can support the present economic crisis before it spills it over into ruptures of another kind, in seeking an answer we must inevitably take into account the hurried transfer of the population. If it continues at the present pace, we can count on no more than 4-5 years. If over that time, according to a quite liberal hypothesis, the share of the farm population in the total population drops to 10 percent and the age-specific composition of the rural population deteriorates, so that out of about 2.5 million persons we have about 1 million "farmers" who are over age 60, it does not seem that we could avoid a final collapse of our physical, financial, and foreign exchange balances, not taking into account any large new borrowing abroad. Which accounts for the urgency of setting in place a vigorous program for putting an end to this flow. The transfer of population from agriculture must be slowed down as much as possible. In the sketch which follows the reader will recognize many points which we find in the Long-Range Economic Stabilization Program or which are close to it.

One point is to greatly speed up the development of agriculture, which should be allowed to set prices and realize income and accumulation in a manner guaranteeing its expanded reproduction. That makes it a necessity for the price scissors on goods produced by the agricultural producer and those which he purchases to be set up in such a way as to afford him a satisfactory and stable income. Then there should be improvements in the supply of credit to finance private farmers for current purposes (planting, fattening, storage, and so on), in the way that is customary for every commodity producer. has to be a suitable set of terms and conditions for the credit financing of capital investments in private agriculture, for regularization of the land, for long-term plantings, to purchase machines, to build farm buildings, and so on. It is essential to socialized agriculture that it become capable of being not only a sound cooperator with the private sector, but also an infrastructural support for it. That means increasing investments in irrigation and drainage systems, large storage facilities, processing plants, and so on, in the socialized sector.

Whereas the analyses have truly demonstrated that the private farmer cannot develop large-scale and up-to-date production with a maximum landholding of 10 hectares, it is advisable not to wait for endless discussions of changes in the constitution, but to settle the issue with urgent amendments. The procurement network is essential to the growth of private agriculture. The farmer should be relieved of the need to carry to the open-air market in the city any quantity he has left over for the market, even the smallest. Here the functions of socialized agriculture and the trade sector are clear and urgent. The nonproduction infrastructure for rural areas, suburban transportation, telephones, water supply, busing children to school, and so on, must be improved in quality. The same applies to the insurance of private farmers, entertainment for rural areas, and the sociopolitical effort in rural areas.

Change the Maximum Size of the Landholding by the Shortest Route

Now that the land has been left in his ownership, we should be consistent in looking at the private farmer as a serious producer for the market.

Other measures would be necessary to eliminate as soon as possible the unproductive mixed-breed worker-peasant, not, of course, by a large-scale layoff of manpower, but through various measures aimed at more intensive economic activity. The strictness of work discipline and employment takes first place.

Except for employed personnel who work on shifts, working hours should in principle be the same as those we encounter everywhere in Europe, both west and east, beginning at 0900 hours. This would contribute significantly to raising productivity and would leave little room for moonlighting. There is no need to mention the importance of remuneration strictly according to the results of work, not only for individuals, but also for collectives. The allocation of free housing, that attractive magic force—is an absolute anachronism. Housing should be purchased, if necessary with the help of credit, and that must also apply to those who already possess a socially owned housing unit. The resources which the economy is now appropriating for the allocation of free housing should be turned by appropriate mechanisms toward loans to finance the nonproduction infrastructure in settlements outside cities. Incidentally, one result would be that countless owners of large "weekend houses" would give up their socially owned apartment in the city, especially when working hours are changed to begin at 0900 hours.

We said that this is only a scanty sketch for a program. There are many other measures which might round it out. The question that remains is that of fulfillment—can it be done? We see from our own case how right Tolstoy was when he said that it is easier to make laws than to govern. The same applies to the program. Nevertheless, it may not be certain that we can carry it out, but it is certain that without it we will go astray in the wilderness.

7045

CSO: 2800/189

END

# END OF FICHE DATE FILMED 6 (hg., 1987)

